UNIVERSITY OF SAN AGUSTIN
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CALA-OR, WARREN BREN

Garlic and Cancer: A Critical Review of the Epidemiologic Literature

ABSTRACT

Animal and in vitro studies provide evidence of an anticarcinogenic effect of active ingredients in garlic. This review of the epidemiologic literature on garlic consumption addresses cancers of the stomach, colon, head and neck, lung, breast and prostate. Nineteen studies reported relative risk estimates for garlic consumption and cancer incidence. Site-specific case-control studies of stomach and colorectal cancer, in which multiple reports were available, suggest a protective effect of high intake of raw and/or cooked garlic. Cohort studies confirm this inverse association for colorectal cancer. Few cohort and case-control studies for other sites of cancer exist. Garlic supplements, as analyzed in four cohort studies and one case-control report, from two distinct populations, do not appear to be related to risk. Low study power, lack of variability in garlic consumption categorization within studies and poor adjustment for potential cofounders may limit the reliability of any conclusions regarding garlic supplements. However, an indication of publication bias was also found by visual inspection of a funnel plot and in a log-rank test ($P = 0.004$). Evidence from available studies nevertheless suggests a preventive effect of garlic consumption in stomach and colorectal cancers. The study limitations indicate the need for more definitive research and improved nutritional epidemiologic analyses of dietary

data.

SUMMARY:

Numerous scientific reports imply that vegetable intake may affect cancer incidence. It is believed that Allium genus of vegetables includes garlic, onions, leeks, scallions, chives and shallots. These vegetables are characterized by a composition that is high in flavonols and organosulfur compounds that can help to reduce the risk of of colorectal, stomach, lung and esophageal cancers. It is reported that an extract of garlic cloves, standardized for its thiosulfinate concentration, inhibited H. pylori growth at a minimum concentration.

An antibacterial effect, particularly against Helicobacter pylori, has been demonstrated. More general anticarcinogenic effects may derive from the same organosulfur compounds in garlic that are responsible for its odor and flavor. The study includes the various research regarding the effect of garlic to a person and its initial effects to the experimental animals. The effect also of garlic supplements have been discussed.

REACTION:

Discoveries and development never stops as well as learning. In this study that the discovery that a garlic can prevent or has an anti-carcinogenic effect in the stomach and other parts of the body is a great help for persons that are health conscious and those that are aware. We may say that the garlic are only spices for foods, a

flavoring or the factor to every dish to have its taste but it has its own natural way to boost our resistance to the feared disease of the generation.

The study is very generalized when it comes to its effect to fight or prevent the development of cancer but it didn't tackle its side effects and other problems or discomforts that will arise when or if taking too much of the said herbal plant. It is like they are advertising the garlic food supplements in the study.

As a student nurse we must not see things in general manner especially in our assessments and gathering of data because we can risk the life of every patient. It is needed that we must should be keen in every case of the patient to promote quality of care restoring the patient in its fullest potential to recovery.

UNIVERSITY OF SAN AGUSTIN
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TEJARES, EUBEN

B-Cell Clones as Early Markers for Chronic Lymphocytic Leukemia

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BACKGROUND

Otherwise healthy persons with a small number of B-cell clones circulating in the peripheral blood have been designated as having monoclonal B-cell lymphocytosis (MBL). Hospital-based series indicate an excess risk of progression from MBL to chronic lymphocytic leukemia (CLL). In this prospective cohort study, we tested the hypothesis that CLL is always preceded by MBL.

METHODS

Among 77,469 healthy adults who were enrolled in the nationwide, population-based Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial, we identified 45 subjects in whom CLL was subsequently diagnosed (up to 6.4 years later) through the collection of a peripheral-blood sample. Using six-color flow cytometry (with antibodies CD45, CD19, CD5, CD10, kappa, and lambda) and immunoglobulin heavy-chain gene rearrangement by reverse-transcriptase–polymerase-chain-reaction assay, we determined the association between MBL and subsequent CLL

and characterized the immunoglobulin gene repertoire of the prediagnostic B-cell clones.

RESULTS

On the basis of either flow-cytometric or molecular analysis, 44 of 45 patients with CLL (98%; 95% confidence interval [CI], 88 to 100) had a prediagnostic B-cell clone; in 41 patients (91%; 95% CI, 79 to 98), the presence of the B-cell clone was confirmed by both methods. The presence of immunoglobulin heavy-chain variable (*IGHV*) genes was determined in 35 of 45 prediagnostic clones (78%). Of these clones, 16 (46%) were *IGHV3* subgroup genes (including 6 [17%] *IGHV3-23*genes) and 9 (26%) were *IGHV4* subgroup genes (including 4 [11%]*IGHV4-34* genes). Furthermore, 27 of 35 of the *IGHV* sequences (77%) had mutations, with similar distributions after stratification either below or above the median time between the collection of the prediagnostic blood sample and the subsequent CLL diagnosis.

CONCLUSIONS

In peripheral blood obtained up to 77 months before a CLL diagnosis, prediagnostic B-cell clones were present in 44 of 45 patients with CLL.

REACTION AND RECOMMENDATION:

Many people today don't want to be sick, not only because it is expensive but also they fear of the pain they might experience. Many diseases are arising and new medications are invented to cure these illnesses. One of the diseases that we people do not want is Cancer; it is the kind of diseases that is difficult to cure and has many complications.

As a student nurse proper health teaching to my patient about proper nutrition, foods rich in fibers, exercise, limiting the exposure to cigarette smoking and alcoholic beverages will prevent the occurrence of the disease. If signs and symptoms occur early check-up and taking up vitamins will also prevent the disease to get worse.

BIBLIOGRAPHY:

Landgren.O , M.D., Ph.D(2009).*"B-Cell Clones as Early Markers for Chronic Lymphocytic Leukemia". N Engl J Med 2009* http://www.nejm.org/doi/full/10.1056/NEJMoa0806122#articleResults

ANACITA, LENELLE

Recent trends in hormone therapy utilization and breast cancer incidence rates in the high incidence population of Marin County, California

Rochelle R Ereman

30 April 2010

Abstract

Background

Recent declines in invasive breast cancer have been reported in the US, with many studies linking these declines to reductions in the use of combination estrogen/progestin hormone therapy (EPHT). We evaluated the changing use of postmenopausal hormone therapy, mammography screening rates, and the decline in breast cancer incidence specifically for Marin County, California, a population with historically elevated breast cancer incidence rates.

Methods

The Marin Women's Study (MWS) is a community-based, prospective cohort study launched in 2006 to monitor changes in breast cancer, breast density, and personal and biologic risk factors among women living in Marin County. The MWS enrolled 1,833 women following routine screening mammography between October 2006 and July 2007. Participants completed a self-administered questionnaire that included items regarding historical hormone therapy regimen (estrogen only, progesterone only, EPHT), age of first and last use, total years of use, and reason(s) for

stopping, as well as information regarding complementary hormone use. Questionnaire items were analyzed for 1,083 non-Hispanic white participants ages 50 and over. Breast cancer incidence rates were assessed overall and by tumor histology and estrogen receptor (ER) status for the years 1990-2007 using data from the Northern California Surveillance, Epidemiology and End Results (SEER) cancer registry.

Results

Prevalence of EPHT use among non-Hispanic white women ages 50 and over declined sharply from 21.2% in 1998 to 6.7% by 2006-07. Estrogen only use declined from 26.9% in 1998 to 22.4% by 2006-07. Invasive breast cancer incidence rates declined 33.4% between 2001 and 2004, with drops most pronounced for ER+ cancers. These rate reductions corresponded to declines of about 50 cases per year, consistent with population attributable fraction estimates for EPHT-related breast cancer. Self-reported screening mammography rates did not change during this period. Use of alternative or complementary agents did not differ significantly between ever and never hormone users. Of women who reported stopping EPHT in the past 5 years, 60% cited "health risks" or "news reports" as their primary reasons for quitting.

Conclusion

A dramatic reduction in EPHT use was followed temporally by a significant reduction in invasive and ER+ breast cancer rates among women living in Marin County, California.

Summary

Breast cancer has been reported in the US, with many studies linking these declines to reductions in the use of combination estrogen/progestin hormone therapy (EPHT). The changing use of postmenopausal hormone therapy, mammography screening rates, and the decline in breast cancer incidence specifically for Marin County, California, a population with historically elevated breast cancer incidence rates.

Breast cancer incidence rates were assessed overall and by tumor histology and estrogen receptor (ER) status for the years 1990-2007 using data from the Northern California Surveillance, Epidemiology and End Results (SEER) cancer registry.

Self-reported screening mammography rates did not change during this period. Use of alternative or complementary agents did not differ significantly between ever and never hormone users. Of women who reported stopping EPHT in the past 5 years, 60% cited "health risks" or "news reports" as their primary reasons for quitting.

It is then concluded that, a dramatic reduction in EPHT use was followed temporally by a significant reduction in invasive and ER+ breast cancer rates among women living in Marin County, California.

Reaction

Worldwide, breast cancer is the most common cancer in women, after skin cancer, representing 16% of all female cancers. There are many different types of breast cancer, with different stages (spread), aggressiveness, and genetic

makeup; survival varies greatly depending on those factors. Most women who suffer from breast cancer are emotionally affected especially in dealing with uncertainty and body-image problems inherent in cancer treatment. As an Augustinian student nurse, equipped with the knowledge, skills and attitude, it is a must to put in mind that not all cancer patients experience their illness in the same manner. There are factors which can attribute to a patient's reaction to a breast cancer diagnosis. With this, it is important to provide supportive environment to help breast cancer patients to cope with their status. Take part in encouraging patient to have a positive outlook even if faced with the diagnosis.

Bibliography

http://breast-cancer-research.com/content/9/3/R28

ANDO, AIREEN

Klotho inhibits growth and promotes apoptosis in human lung cancer cell line A549

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Abstract

Background

Klotho, as a new anti-aging gene, can shed into circulation and act as a multi-functional humoral factor that influences multiple biological processes. Recently, published studies suggest that klotho can also serve as a potential tumor suppressor. The aim of this study is to investigate the effects and possible mechanisms of action of klotho in human lung cancer cell line A549.

Methods

In this study, plasmids encoding klotho or klotho specific shRNAs were constructed to overexpress or knockdown klotho in vitro. A549 cells were respectively treated with pCMV6-MYC-KL or klotho specific shRNAs. The MTT assay was used to

evaluate the cytotoxic effects of klotho and flow cytometry was utilized to observe and detect the apoptosis of A549 cells induced by klotho. The activation of IGF-1/insulin signal pathways in A549 cells treated by pCMV6-MYC-KL or shRNAs were evaluated by western blotting. The expression levels of bcl-2 and bax transcripts were evaluated by quantitative reverse transcription-polymerase chain reaction (qRT-PCR).

Results

Overexpression of klotho reduced the proliferation of lung cancer A549 cells, whereas klotho silencing in A549 cells enhanced proliferation. Klotho did not show any effects on HEK-293 cells. Klotho overexpression in A549 cells was associated with reduced IGF-1/insulin-induced phosphorylation of IGF-1R (IGF-1 receptor)/IR (insulin receptor) ($P < 0.01$). Overexpression of klotho can promote the apoptosis of A549 cells ($P < 0.01$). Overexpression of klotho, a bcl family gene bax, was found up-regulated and bcl-2, an anti-apoptosis gene, was found down-regulated ($P < 0.01$). In contrast, bax and bcl-2 were found down-regulated ($P < 0.05$) and up-regulated ($P < 0.01$), respectively when silencing klotho using shRNAs.

Conclusions

Klotho can inhibit proliferation and increase apoptosis of A549 cells, this may be partly due to the inhibition of IGF-1/insulin pathways and involving regulating the expression of the apoptosis-related genes bax/bcl-2. Thus, klotho can serve as a potential tumor suppressor in A549 cells.

SUMMARY:

A new anti-aging gene, can shed into circulation and act as a multi-functional humoral factor that influences multiple biological processes. Published studies suggest that klotho can also serve as a potential tumor suppressor. In this study, plasmids encoding klotho or klotho specific shRNAs were constructed to overexpress or knockdown klotho in vitro. A549 cells were respectively treated with pCMV6-MYC-KL or klotho specific shRNAs. The MTT assay was used to evaluate the cytotoxic effects of klotho and flow cytometry was utilized to observe and detect the apoptosis of A549 cells induced by klotho. Overexpression of klotho reduced the proliferation of lung cancer A549 cells, whereas klotho silencing in A549 cells enhanced proliferation.

REACTION:

Cancer is not just one disease, but a large group of almost 100 diseases. Its two main characteristics are uncontrolled growth of the cells in the human body and the ability of these cells to migrate from the original site and spread to distant sites. If the spread is not controlled, cancer can result in death.

Cancer can attack anyone. Cancer, by definition, is a disease of the genes. A gene is a small part of DNA, which is the master molecule of the cell. Genes make "proteins," which are the ultimate workhorses of the cells. It is these proteins that allow our bodies to carry out all the many processes that permit us to breathe, think, move, etc.

Throughout people's lives, the cells in their bodies are growing, dividing, and replacing themselves.

In this study, a new anti aging gene was discovered, known as klotho, that served as a potential tumor suppressor. As latest technology is developing, new discoveries for the treatment especially for a specific disease is likewise in advancement. Learning is continuous, in that discoveries for this different treatment of persons also continuous.

As a student nurse, especially in this field it is important for us to be aware of these latest trends, which would help to become an efficient health care provider. In caring particularly for this patient’s it is really important to be knowledgeable especially of client’s condition. To be aware of client’s condition could mean giving him or her the specific care he or she needed.

BIBLIOGRAPHY:

http://medical-dictionary.thefreedictionary.com/Cancer

UNIVERSITY OF SAN AGUSTIN
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AUTAJAY, MARIE JOIE

A Network Model of a Cooperative Genetic Landscape in Brain Tumors

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JAMA. 2009;302(3):261-275.

ABSTRACT

Context

Gliomas, particularly glioblastomas, are among the deadliest of human tumors. Gliomas emerge through the accumulation of recurrent chromosomal alterations, some of which target yet-to-be-discovered cancer genes. A persistent question concerns the biological basis for the coselection of these alterations during gliomagenesis.

Objectives

To describe a network model of a cooperative genetic landscape in gliomas and to evaluate its clinical relevance.

Design, Setting, and Patients

Multidimensional genomic profiles and clinical profiles of 501 patients with gliomas (45 tumors in an initial discovery set collected between 2001 and 2004 and 456 tumors in validation sets made public between 2006 and 2008) from

multiple academic centers in the United States and The Cancer Genome Atlas Pilot Project (TCGA).

Main Outcome Measures

Identification of genes with coincident genetic alterations, correlated gene dosage and gene expression, and multiple functional interactions; association between those genes and patient survival.

Results

Gliomas select for a nonrandom genetic landscape—a consistent pattern of chromosomal alterations—that involves altered regions ("territories") on chromosomes 1p, 7, 8q, 9p, 10, 12q, 13q, 19q, 20, and 22q (false-discovery rate–corrected $P<.05$). A network model shows that these territories harbor genes with putative synergistic, tumor-promoting relationships. The coalteration of the most interactive of these genes in glioblastoma is associated with unfavorable patient survival. A multigene risk scoring model based on 7 landscape genes (*POLD2*, *CYCS*, *MYC*, *AKR1C3*, *YME1L1*, *ANXA7*, and *PDCD4*) is associated with the duration of overall survival in 189 glioblastoma samples from TCGA (global log-rank $P = .02$ comparing 3 survival curves for patients with 0-2, 3-4, and 5-7 dosage-altered genes). Groups of patients with 0 to 2 (low-risk group) and 5 to 7 (high-risk group) dosage-altered genes experienced 49.24 and 79.56 deaths per 100 person-years (hazard ratio [HR], 1.63; 95% confidence interval [CI], 1.10-2.40; Cox regression model $P = .02$), respectively. These associations with survival are validated using gene expression data in 3 independent glioma studies, comprising 76 (global log-rank $P = .003$; 47.89 vs 15.13 deaths per 100 person-years for

high risk vs low risk; Cox model HR, 3.04; 95% CI, 1.49-6.20; *P* = .002) and 70 (global log-rank *P* = .008; 83.43 vs 16.14 deaths per 100 person-years for high risk vs low risk; HR, 3.86; 95% CI, 1.59-9.35; *P* = .003) high-grade gliomas and 191 glioblastomas (global log-rank *P* = .002; 83.23 vs 34.16 deaths per 100 person-years for high risk vs low risk; HR, 2.27; 95% CI, 1.44-3.58; *P*<.001).

Conclusions

The alteration of multiple networking genes by recurrent chromosomal aberrations in gliomas deregulates critical signaling pathways through multiple, cooperative mechanisms. These mutations, which are likely due to nonrandom selection of a distinct genetic landscape during gliomagenesis, are associated with patient prognosis.

SUMMARY

Malignant gliomas, with disproportionately high morbidity and mortality, are among the most devastating of human tumors. Forty-five fresh-frozen glioma specimens of varying morphology were collected at Stanford University under Stanford Institutional Review Board–approved guidelines. Written informed consent was obtained from all patients. Specimens were analyzed by a neuropathologist to confirm the histological diagnosis and the presence of vital tumor tissue without excessive contamination (<10%) by normal brain and tumor necrosis. Forty-five patients treated at Stanford University between April 5, 2001, and April 19, 2004, constituted the initial molecular discovery set. Diagnoses included 26 glioblastomas, 5 astrocytic gliomas (grades I-III), 8 oligodendrogliomas (including 3 anaplastic oligodendrogliomas), and 6 anaplastic oligoastrocytomas according to World Health Organization classification. Two hundred nineteen glioblastoma samples collected between July 26, 1989, and November 23, 2007, and profiled as part of TCGA constituted a molecular validation set and a clinical training set. Corresponding clinical data were available for 207 of the 219 patients (77 females and 130 males), of which 192 were dead and 15 were alive at last follow-up. The pathobiology of human gliomas emerges through the actions of multiple genes and their interactions with each other. The current work provides a network model and biological rationale for the selection of a nonrandom genetic landscape in human gliomas. Coincident genetic alterations of multiple landscape genes may evolve rapidly under positive selection to provide multiple, synergistic mechanisms of dysregulation

of critical signaling pathways toward gliomagenesis. A multigene predictor model incorporating 7 landscape genes demonstrates how molecular insights emerging from our integrative multidimensional analysis could translate into relevant clinical end points affecting the future management of gliomas.

REACTION

Cancer is one of the most deadly diseases that a man could experience that are difficult to fight to. It is very rare that a person could ever survive that disease once it gets to the most fatal stage. Early detection of tumors should be done to get an early treatment.

As a student nurse, it is my responsibility to promote in every person for the prevention in any diseases by giving health teachings in preventing from acquiring diseases that could lead to complications in their health status, also early detection of possible alteration in one's health should be given importance and encourage every person to always visit a health care professional for a health check up once sign and symptoms of any health illness felt. Giving emphasis in every person regarding the importance of having a healthy body would help them realize the value of taking good care of their own health and they would be responsible enough to watch for their health status and take actions when alterations are felt.

SOURCE: http://jama.highwire.org/cgi/content/full/302/3/261v

UNIVERSITY OF SAN AGUSTIN
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BASISTIN, KIMBERLY

Cure Cervical Cancer through Diet, Yoga and Meditation

Allison Biggar, citizen journalist

Monday, January 04, 2010

(NaturalNews) Cervical cancer is the second most common cancer among women and almost 4,000 cases were fatal just last year. Conventional treatments for cervical cancer such as chemotherapy, radiation, surgery, hysterectomy, or the removal of lymph nodes and ovaries can often leave the woman infertile. However, alternatives exist for women who seek a more holistic approach to improving their bodies' responses to cancer. Cervical cancer can be remedied in ways alternative to conventional, damaging treatments. Instead of harsh treatments that can wreak havoc on the body, a combination of yoga, meditation, and a raw vegan diet can be a much more gentle and beneficial method for healing.

A raw vegan diet, for instance, is based on unprocessed and uncooked plant foods such as fresh fruits and vegetables, seeds, sprouts, grains, nuts, beans, and seaweed. Raw foods and juices deliver pure, powerful nutrients straight to your system and are full of antioxidants and enzymes, which are vital to good health. Antioxidants, for example, reduce the cellular by-products of free radicals, which can lead to cancer. According to Leslie Kenton, author of Raw Energy, "Doctors and scientists confirm that raw diets not only prevent colds and flu and retard aging, but they can

also help to cure cancer, diabetes, ulcers and arthritis."

When Amanda Deming learned she had cervical cancer from her pap smear results, she revised the way she prepared and ate food, instead of getting surgery to remove the cancerous cells. Not only did Deming decide against conventional treatment and chose to heal her body naturally, but she became a raw food chef, as well. "I think that you are what you eat and whatever you put into your body is definitely going to manifest. If you`re eating foods on a higher vibration, you`re going to run on a higher vibration," said Deming.

In addition to what you put in your body, it is also valuable to pay attention to how you treat your body. Yoga, including kundalini yoga, which focuses on awareness and chakra balancing, reduces stress and combats life-threatening conditions like cancer. For instance, yoga and meditation help cancer patients to use their breath to heal the body. According to Deming, "I think once you get into meditation, you`re able to listen to your body and you are actually more in tune to everything that`s going on around you--especially from within."

Deming, like many other yoga practitioners, learned to use her own body to heal itself. Today, she is cancer-free and is a certified yoga teacher, raw food chef, massage therapist and singer. "I plan to live a long and healthy life full of positive energy, vibrant foods, great people and just be happy, healthy and holy." Cervical cancer can be a formidable obstacle and life-threatening deterrence, but it need not be a nonnegotiable battle with one's body,

as Deming's case affirms. Through the use of meditation and yoga, in addition to adopting a raw food diet, one may even emerge stronger, healthier, and wiser.

SUMMARY:

It is discussed in this article that the second most cancer among women and fatal case that causes death is the Cervical Cancer. Different conventional treatment such as chemotherapy, radiation, surgery, hysterectomy, and removal of the lymph nodes are done to cure or to apply palliative care to the patients. However, in this article it suggests that cervical cancer can be remedied in ways alternative to conventional, damaging treatments. Instead of harsh treatments that can wreak havoc on the body, a combination of yoga, meditation, and a raw vegan diet can be a much more gentle and beneficial method for healing. A raw vegan diet, for instance, is based on unprocessed and uncooked plant foods such as fresh fruits and vegetables, seeds, sprouts, grains, nuts, beans, and seaweed. Raw foods and juices deliver pure, powerful nutrients straight to your system and are full of antioxidants and enzymes, which are vital to good health. On the other hand, yoga and meditation is also valuable on how to treat the body. It helps focuses on awareness and reduces stress and combats life-threatening conditions. Through the use of meditation and yoga, in addition to adopting a raw food diet, one may even emerge stronger, healthier, and wiser.

REACTION:

Cancer is one of the most life-threatening conditions that once diagnosed; miracle can be the only resort to be perfectly cured. The disease process and the effects of treatment on normal tissue present common complications that require effective nursing management to achieve desired outcomes. Cancer care is not just about the disease and treatment; it comes in the midst of people's lives. Therefore an important role of the nurse in managing outcomes is to recognize, intervene, and provide support for the human responses to living with cancer.

As a student nurse, it is my obligation to impart the knowledge that I have learned to other people in order to prevent cancer and somehow provide palliative care with cancer patients. Providing health teachings such as alteration of lifestyle behaviors to eliminate or reduce exposure to carcinogens, adapting a more healthful diet and physical active lifestyle, limiting exposure to sun or other source of ultraviolet radiation. It is also important to teach modification in sexual activities which likely to cause cervical cancer. Family support group and showing empathy and acceptance with cancer patients can also be a relief for them so that they may feel comfortable and relaxed. Through this simple ways, we can practice early prevention and provide comfort with cancer patients.

BIBLIOGRAPHY:

http://www.naturalnews.com/027867_cervical_cancer_yoga.html

BERNABE, SYNTHNY ANN

Safety of fat grafting in secondary breast reconstruction after cancer

Rietjens M, De Lorenzi F, Rossetto F, Brenelli F, Manconi A, Martella S, Intra M, Venturino M, Lohsiriwat V, Ahmed Y, Petit JY.

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Abstract

BACKGROUND

Fat grafting is largely used to correct soft-tissue defects in any region of the human body. This study analysed its safety when the technique is used to correct defects after breast-cancer reconstruction.

METHODS

A total of 158 patients who underwent 194 breast fat grafting procedures were analysed. Almost all patients (98%) had a personal history of breast cancer: conservative surgery or mastectomy with breast reconstruction. In all cases, fat grafting was performed according to the Coleman's technique by a single surgeon.

RESULTS

Immediate complications included liponecrosis and infection in seven cases (3.6%) that required only daily dressings and oral antibiotics administration. In cases of fat

grafting after conservative surgery, only four patients (5.9%) showed minor alterations in the postoperative mammograms, consisting of the appearance of benign images.

CONCLUSION

Breast fat grafting can be a good solution to repair defects after breast-cancer treatment and reconstruction, and can reduce the indication for more extensive surgeries such as myocutaneous flaps. Postoperative complication rates are very low and there is little alteration in follow-up mammograms. Two points remain unclear - How much of the fat is absorbed after grafting and the potential risk of local 'dormant' tumour cells being stimulated to induce a local recurrence.

SUMMARY:

This study analyzed the safety of fat grafting when used to correct defects after breast-cancer reconstruction. The participants of this research are patients who underwent breast fat grafting by a single surgeon after having a conservative surgery or mastectomy with breast reconstruction in the past. The results showed that there were minimal complications which were manageable. With regards to fat grafting, only a few showed minor alterations post-operatively. The authors concluded that breast fat grafting can be a good solution to repair defects after breast-cancer treatment and reconstruction, and can reduce the indication for more extensive surgeries.

REACTION:

Breast cancer is the most common cancer in the Philippines. It is common to the people's ears. Breast cancer mostly affects women. If diagnosed and treated early, the patient could survive the illness and prevent occurrence of complications.

The research study stated that after undergoing conservative surgery or mastectomy with breast reconstruction, breast fat grafting can be a good solution to repair defects after treatment and reconstruction. This research study gave us new information about further treatments post-operatively among breast cancer patients.

This research study is also of great help to breast cancer patients. This research could help improve their way of living and prevent disturbances of body image. Breast cancer victims sometimes may have he tendency to think twice about mastectomy because they may feel anxious of their body image post-operatively. With this research, people especially the breast cancer victims may worry less about their body image post-operatively. The results also stated that there is minimal alteration in follow-up mammograms. As such, these patients who will undergo fat grafting must be encouraged to have regular breast self examination and mammography to prevent complications.

As student nurses, we must encourage women to perform breast self examination (BSE) to assess their breasts for any changes. We must also encourage women from 18 years old and above to undergo mammography for further assessment since small tumors are hard to be felt by using BSE only.

We may also teach our clients the proper way to assess their breasts so to avoid misconceptions. We may also educate them regarding breast cancer since it is the cancer which is very common in the Philippines. We may also inform them of the ways to prevent breast cancer, such as proper brassiere use. We may also encourage our clients to seek medical help immediately if they experience one or more of the cardinal signs of cancer. We must also encourage our clients, especially those at higher risk to participate in screening tests foe early detection, diagnosis and treatment. In this way, complications are avoided and patients may have higher rate of survival.

It is suggested that further study regarding fat absorption after grafting and the potential risk of local 'dormant' tumor cells should be conducted. It is also suggested that women may undergo fat grafting.

Among women who had undergone fat grafting, I suggest that they should continue their treatment as ordered, and comply with their follow-up check-ups as scheduled to prevent complications and promote wellness. I also suggest that health education and awareness regarding breast cancer prevention, diagnosis and treatment will be conducted especially to those who are at higher risk of experiencing such illness. This is to promote awareness and promote wellness.

BIBLIOGRAPHY:

Rietjens M, et al. 'Safety of fat grafting in secondary breast reconstruction after cancer' 2010 [Online] available

<http://www.ncbi.nlm.nih.gov/pubmed/20692216> (August 16, 2010)

UNIVERSITY OF SAN AGUSTIN
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CHAVES, JUSTIN RAE

Cigarette Smoking and the Risk of Endometrial Cancer: A Meta-Analysis

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Abstract

Objective

Epidemiologic findings are inconsistent concerning the association of endometrial cancer risk with cigarette smoking. We conducted a meta-analysis of epidemiologic studies to examine this relation.

Methods

A systematic literature search up to June of 2007 was performed in MEDLINE and EMBASE. Study-specific risk estimates were pooled using a random-effects model.

Results

Ten prospective and 24 case-control studies were included in the analysis of the effect of ever smoking. Ever smoking was statistically significantly associated with a reduced risk of endometrial cancer among prospective studies (relative risk 0.81; 95% confidence interval [CI], 0.74-0.88) and case-control studies (odds ratio 0.72; 95% CI, 0.66-0.79). The inverse association was significant among current and former smokers. Six prospective and 6 case-control studies were included in the quantitative analysis. We noted that an increase in smoking of 20 cigarettes per day was statistically significantly associated with 16% and 27% reduced risks of endometrial cancer in prospective and case-control studies, respectively. We also found that cigarette smoking was significantly associated with a decreased risk of endometrial cancer among postmenopausal women (relative risk 0.71; 95% CI, 0.65-0.78) but not among premenopausal women. In addition, the risk reduction seemed

to be stronger among hormone replacement therapy users than nonusers.

Conclusion

Cigarette smoking was found to be significantly associated with a reduced risk of endometrial cancer, especially among postmenopausal women.

SUMMARY:

The study conducted was a meta- analysis regarding the association of cigarette smoking to risk of having endometrial cancer. There was inconsistency in the previous study so the researchers conducted a meta- analysis regarding the relation of cigarette smoking to endometrial cancer. The methodology used is random- effects model. The effect of ever smoking was studied in 24 controlled cases. The results showed that there is an inverse association between smoking and risk for endometrial cancer. It showed that smokers who have 20 sticks of cigarette per day were associated with 16% to 27% reduced risk of having endometrial cancer. Therefore, cigarette smoking was found to be significantly associated with a reduced risk of endometrial cancer, especially among postmenopausal women.

REACTION:

Contrary to popular belief, cigarette smoking has an effect that may be beneficial to a postmenopausal woman. This is the reduced risk of endometrial cancer. It is somehow good news, since women who smoke may not be at risk of catching cancer. It is quite unusual to learn this article actually supports cigarette smoking among postmenopausal women. As a student nurse, health teachings are very important in emphasizing optimal health. Of course, it is not advisable to encourage cigarette smoking, but there might be exception to certain rules. Maybe, I can suggest not to cease, but to minimize cigarette smoking. It is still more

important to maintain healthy diet and exercise than depending on smoking. As student nurses, an advocate to good health is always our number one priority to our clients.

BIBLIOGRAPHY:

doi:10.1016/j.amjmed.2008.01.044.http://www.amjmed.com/article/S0002-9343%2808%2900194-0/abstract

UNIVERSITY OF SAN AGUSTIN
COLLEGE OF NURSING

DE LA CRUZ MELICENT

Neurodevelopmental outcome of infants with meconium aspiration syndrome: report of a study and literature review

Beligere N, Rao R.

J Perinatol. 2008 Dec;28 Suppl 3:S93-101

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Abstract

There is a paucity of information on long-term outcome of infants who have suffered from meconium aspiration syndrome (MAS) in the neonatal period. We analyzed long-term developmental outcome data of 35 infants who were admitted to the neonatal intensive care unit (NICU) at the University of Illinois Hospital at Chicago (UICMC) with a diagnosis of MAS, and we reviewed the literature pertinent to the subject. The objective of the study was to assess the neurodevelopment status of MAS infants and compare the possible effects of different variables that are known to affect the later developmental outcome. The variables included mode of delivery, APGAR score, cord pH, mode of treatment, and neurological findings during the course of NICU. The infants were enrolled in the developmental follow-up program (DFUP) after discharge from the nursery for assessment of long-term developmental status and neurodevelopmental outcome. In order to assess the impact of the treatment on long-term outcome and compare our

findings with previously published reports, we also reviewed the previously published literature on neurodevelopment outcome of infants treated for MAS (with different modalities) during the last three decades. Total of 35 infants with a diagnosis of MAS admitted to the NICU at UICMC were followed in the DFUP clinic for 3 years during January 1999 to September 2001. The medical records of these infants were reviewed for the mode of delivery, APGAR score, birth weight (BW), gestational age, mode of treatment during the neonatal period, and neurodevelopment status. 19/35 (54%) infants were delivered vaginally, 16/35 (46%) by cesarean section (C-section). All were treated in the delivery room using the standard resuscitation protocol. Following initial resuscitation, all except three required intubation and ventilation for varying duration. One infant required inhaled nitric oxide therapy, and two required extracorporeal membrane oxygenation treatment. Subsequent to discharge, the infants were evaluated in the clinic at 2 months of age, and then every 4 months up to 3 years. The developmental assessment of mental development index (MDI), psychomotor development index (PDI), and behavior rating scale (BRS) were obtained using the Bayley II infant motor scale, and neurodevelopment evaluation was performed using the Amiel-Tison technique. Speech evaluation was performed in infants >18 months using the Rossetti Infant-Toddler language scale. Infants were considered normal when MDI and PDI scores were >85 to 110; mildly delayed when scores were >70 to 84; and severely delayed if the scores were <69. In addition, neurological evaluation also confirmed the disability. The report is based on the final analysis of 29 infants. Data of six infants were not included in the final analysis because of

incomplete information. The mean BW of the infants was 3269+/-671 g; mean gestational age was 39.5+/-3.1 weeks. The median APGAR score at 1' was 4, and at 5' was 6. Out of 29, 11 (38%) infants were normal. Out of 29, 2 infants (7%) had cerebral palsy (CP) and 4 (14%) had severe delay at 12 months of age. Out of 29, 2 who were neurologically disabled had PDI <69. Out of 29, 12 (41%) had mild delay in speech. No statistical difference in neurodevelopment was found in infants born vaginally or by C-section. Our findings show poor outcome (CP and global delay) in 21% of infants who suffered MAS, even though the majority of the infants (26/29) responded to conventional ventilator support alone. No difference was found in the outcome of infants between NSVD vs C-section delivery. These findings suggest that infants with the diagnosis of MAS manifest later neurodevelopmental delays, even if they respond well to conventional treatment.

SUMMARY:

This study is about the long-term outcome of infants who have suffered from meconium aspiration syndrome (MAS) in the neonatal period which was conducted at the neonatal intensive care unit (NICU) at the University of Illinois Hospital at Chicago. Total of 35 infants with a diagnosis of MAS admitted to the NICU at UICMC were followed. All were treated in the delivery room using the standard resuscitation protocol. The developmental assessment of mental development index (MDI), psychomotor development index (PDI), and behavior rating scale (BRS) were obtained and were evaluated using specific test for each category. These findings suggest that infants with the diagnosis of

MAS manifest later neurodevelopmental delays, even if they respond well to conventional treatment.

REACTION:

Every expectant parent hopes for an uncomplicated birth and a healthy baby. But some babies do face delivery room complications. One condition that may affect a newborn's health is meconium aspiration, also referred to as meconium aspiration syndrome (MAS). he inhaled meconium can partially or completely block the baby's airways. Although air can flow past the meconium trapped in the baby's airways as the baby breathes in, the meconium becomes trapped in the airways when the baby breathes out. And so, the inhaled meconium irritates the baby's airways and makes it difficult to breathe.

This study is a relevant one in order for the readers to have knowledge about the neurodevelopmental status of MAS infants and the possible effects to the infants that are known to affect the later developmental outcome in their life.

As a nursing student, our nursing responsibility is to perform suctioning to newborns right after the delivery of the mother in order to clear the airway for possible meconium aspiration. Advising the pregnant mother for a regular prenatal check up is very important to asses her health status and of the baby if there are any complications and in order to be given immediate intervention.

BIBLIOGRAPHY:

http://www.ncbi.nlm.nih.gov/pubmed/19057618

Delojo, Hannah Jane.....33-34

DEMANAWA, CLEOFE

New Research Reveals Ultrasound Treatment of Benefit to Prostate Cancer Sufferers

Article Date: 04 Dec 2007 - 1:00 PDT

First analysis of the long-term results with transrectal HIFU in patients with localized prostate cancer (*European Journal of Urology*) Prostate cancer experts say high intensity focused ultrasound (HIFU) is an effective treatment option for men with prostate cancer, according to new research published this month in the *European Journal of Urology*.

Experts from France and Germany studied the results of 140 people with prostate cancer over an eight year period and published their findings in the *EJU*. They found that HIFU treatment resulted in negative biopsies in almost nine out of ten (86 per cent) patients, and after five years men's PSA levels were low and stable in eight out of ten (77 per cent) cases, indicating a high treatment success rate. The researchers followed all the patients for at least five years and concluded that HIFU is effective in treating prostate cancer where the cancer has not spread outside the prostate, and that HIFU is a valid alternative to radiotherapy.

The results are likely to put pressure on the National Institute for Clinical Excellence, which is considering

reducing the status of HIFU to clinical trials only. Prostate cancer is the most commonly diagnosed cancer in men and kills around 10,000 men a year in the UK. HIFU is a minimally-invasive treatment for localized prostate cancer in which precisely targeted ultrasound waves are focused within the prostate and instantly destroy cancerous cells. The treatment lasts one to three hours and, unlike surgery or radiation therapy, can be repeated if necessary.

Today's results show that HIFU is not only an effective treatment option for prostate cancer, but that the side-effects such as incontinence and impotence are milder than those of other treatments. HIFU has been available on the NHS since it received NICE approval in 2005. However, in new draft guidance on prostate cancer NICE is considering reversing its earlier position and limiting the use of HIFU to clinical trials only. Today's study indicates that HIFU should be a generally accepted form of treatment for prostate cancer.

SUMMARY:

Prostate cancer is a form of cancer that develops in the prostate, a gland in the male reproductive system. Most prostate cancers are slow growing; however, there are cases of aggressive prostate cancers. The cancer cells may metastasize (spread) from the prostate to other parts of the body, particularly the bones and lymph nodes. Prostate cancer may cause pain, difficulty in urinating, problems during sexual intercourse, or erectile dysfunction. Other symptoms can potentially develop during later stages of the disease. Prostate cancer tends to develop in men over the age of fifty and although it is one of the most prevalent types of cancer in men, many never have symptoms, undergo no therapy, and eventually die of other causes. This is because cancer of the prostate is, in most cases, slow-growing, symptom-free, and since men with the condition are older they often die of causes unrelated to the prostate cancer, such as heart/circulatory disease, pneumonia, other unconnected cancers, or old age. Treatment options for prostate cancer with intent to cure are primarily surgery, radiation therapy, and proton therapy. Other treatments, such as hormonal therapy, chemotherapy, cryosurgery, high intensity focused ultrasound (HIFU) is an effective treatment option for men with prostate cancer, according to new research published this month in the *European Journal of Urology*. Experts from France and Germany studied the results of 140 people with prostate cancer over an eight year period and published their findings in the *EJU*. They found that HIFU treatment resulted in negative biopsies in almost nine out of ten (86 per cent) patients, and after five years men's PSA levels were low and stable in eight

out of ten (77 per cent) cases, indicating a high treatment success rate. HIFU is effective in treating prostate cancer where the cancer has not spread outside the prostate, and that HIFU is a valid alternative to radiotherapy.

REACTION:

This innovative and revolutionary treatment clearly has the capacity to help men with prostate cancer all around the world. Indeed, I would say it is an ideal treatment option for men with localized prostate cancer and it should be part of a doctor's armory when treating the disease."But prevention of it is indeed much more important. Exercise and diet may help prevent prostate cancer to the same extent as medications such as alpha-blockers and 5-alpha-reductase inhibitors. Eat plenty of cruciferous vegetables. Eat moderate-sized portions and keep your calories under control. Maintain a daily fluid intake of 8 to 12 glasses per day. This will help increase urination, which will help to maintain a clean urinary tract. Take your vitamins, and have a regular check up with your physician. Staying healthy is a great thing that you can give to yourself.

SOURCE:

http://www.medicalnewstoday.com/articles/90541.php

UNIVERSITY OF SAN AGUSTIN
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DIMZON, GILLIAN

New Therapies for Castration-Resistant Prostate Cancer

Dan L. Longo, M.D.

N Engl J Med 2010; 363:479-481July 29, 2010

On April 29, 2010, the Food and Drug Administration (FDA) approved a new immunotherapy, sipuleucel-T, for the treatment of patients with asymptomatic or minimally symptomatic castration-resistant prostate cancer. Traditionally, immune-based therapies have been categorized according to whether the agent has direct antitumor effects (so-called passive immunotherapy) or stimulate a host antitumor response (active immunotherapy) and whether the agent elicits a general increase in immune activation (nonspecific) or an immune response based on tumor recognition (specific). Sipuleucel-T is a form of active specific immunotherapy.

The sipuleucel-T intervention involves harvesting the patient's peripheral-blood mononuclear cells (PBMCs), culturing them with a chimeric protein containing granulocyte–macrophage colony-stimulating factor (GM-CSF) to activate antigen presentation together with prostatic acid phosphatase as a tumor-associated antigen, and then infusing the antigen-pulsed antigen-presenting cells (APCs) back into the patient. Three intravenous infusions of antigen-pulsed APCs are given once every 2 weeks; a course of therapy is completed in a month.

In this issue of the *Journal,* Kantoff et al. report the results of a clinical trial that helped convince the FDA to approve sipuleucel-T for clinical use. Men whose tumors had progressed after combined androgen blockade were randomly assigned in a 2:1 ratio to receive sipuleucel-T immune activation or a placebo composed of autologous PBMCs not cultured with the chimeric protein. Tumor response was assessed on the basis of the level of prostate-specific

antigen (PSA), computed tomography, and bone scans. The median survival was 25.8 months in the sipuleucel-T group, as compared with 21.7 months in the placebo group (unadjusted hazard ratio for death in the sipuleucel-T group, 0.77; P=0.02). Study-group assignment had no significant effect on the time to tumor progression; 1 of 341 patients in the sipuleucel-T group had a partial tumor response, and 3% had a reduction of at least 50% in PSA level on two visits at least 4 weeks apart. Thus, the improvement in survival came without evidence of a measurable antitumor effect. Two thirds of patients receiving sipuleucel-T had antibody responses to the immunogen, and nearly three fourths had T-cell proliferative responses. Survival was improved for patients who had an antibody response but not for those with a T-cell response. Nearly identical results emerged from a previous smaller study with the same agent.

Patients with metastatic cancer have myriad tumor-induced immune defects, including abundant regulatory T cells that suppress cytotoxic T-cell responses, myeloid suppressor cells, immunosuppressive cytokines, defective antigen presentation, and T cells bearing signaling defects. Any immune therapy in a tumor-bearing host has an uphill battle that probably involves barriers that have not yet been defined. The adjuvant setting may provide a larger window of opportunity for immune-activating therapies. Thus, a 23% reduction in the risk of death in patients with metastatic disease is an important step.

The findings in this study raise a few questions. First, a better control group would have included patients receiving PBMCs incubated with GM-CSF alone so that the main variable between the two study groups would be the tumor antigen. The current design does not allow one to conclude that the tumor antigen is a key component of the therapy. Second, the prolongation of survival without a measurable antitumor effect is surprising. It is hard to understand how the natural history of a cancer can be affected without some apparent measurable change in the tumor, either evidence of

tumor shrinkage or at least disease stabilization reflected in a delay in tumor progression. This lack of tumor effect raises concern that the results could have been influenced by an unmeasured prognostic variable that was accidentally imbalanced in study-group assignments. As the authors point out, differences in subsequent treatments (e.g., docetaxel) do not appear to account for the survival differences, but methods for assessing such effects are imperfect. New prognostic variables such as statin use, the duration of the first off-treatment interval, circulating tumor cells (as assessed as EpCAM+CK+CD45– objects), and new prognostic algorithms may need to be accounted for in assessing therapeutic effects.

Other immunization strategies are being tested in patients with prostate cancer. A vaccine called GVAX that is composed of two allogeneic prostate-cancer cell lines infected with adenoviruses that allow the cells to secrete GM-CSF was unsuccessful in phase 3 testing. However, another product, called PROSTVAC-VF, composed of two recombinant vaccinia-based viral vectors containing PSA and three immune costimulatory molecules, prolonged median survival by 8.5 months in a randomized phase 2 study. Like sipuleucel-T, PROSTVAC-VF improved survival without improving progression-free survival. It is now being tested in phase 3 studies.

Other prospects for vaccine development include peptide vaccines, DNA-based vaccines, and novel strategies such as targeting antigens to major histocompatibility complex class I pathways with chemokine–antigen chimeric molecules.

Another concern with sipuleucel-T treatment is the cost. The current cost of care for men with prostate cancer has been estimated to be about $1,800 per month. The manufacturer has set the cost of a 1-month course of sipuleucel-T at $93,000, or $23,000 per month of survival advantage. The high cost may affect use. It is also uncertain what role sipuleucel-T will ultimately play in the treatment of prostate cancer, given the other promising treatments in development.

Castration-resistant prostate cancer was formerly known as hormone-refractory prostate cancer. However, even after tumors progress through combined androgen blockade, they retain dependence on the androgen receptor. Many novel agents are in development, some of which have shown dramatic antitumor effects in the earliest phases of clinical testing. Abiraterone blocks the synthesis of androgens; 51% of men who were treated with 1 g of the drug per day had a reduction in PSA levels of at least 50%, and 27% of patients had a partial tumor response. Experimental drug MDV3100 blocks nuclear translocation of the androgen receptor. In a phase 1 and 2 study, antitumor effects were noted at every dose of the agent, including a reduction in PSA levels of at least 50% in 56% of patients, responses in soft-tissue lesions in 22% and in stabilized bone lesions in 56%, and a reduction in circulating tumor-cell counts in 49%.

The prospects for improved therapy for prostate cancer have never been so encouraging. The poor prognosis for men with prostate cancer will probably be substantially improved by the findings that emerge from ongoing clinical research.

SUMMARY:

On April 29, 2010, the Food and Drug Administration (FDA) approved a new immunotherapy, sipuleucel-T, for the treatment of patients with asymptomatic or minimally symptomatic castration-resistant prostate cancer. Traditionally, immune-based therapies have been categorized according to whether the agent has direct antitumor effects (so-called passive immunotherapy) or stimulate a host antitumor response (active immunotherapy) and whether the agent elicits a general increase in immune activation (nonspecific) or an immune response based on tumor recognition (specific). Sipuleucel-T is a form of active specific immunotherapy.

The sipuleucel-T intervention involves harvesting the patient's peripheral-blood mononuclear cells (PBMCs),

culturing them with a chimeric protein containing granulocyte–macrophage colony-stimulating factor (GM-CSF) to activate antigen presentation together with prostatic acid phosphatase as a tumor-associated antigen, and then infusing the antigen-pulsed antigen-presenting cells (APCs) back into the patient. Three intravenous infusions of antigen-pulsed APCs are given once every 2 weeks; a course of therapy is completed in a month.

Castration-resistant prostate cancer was formerly known as hormone-refractory prostate cancer. However, even after tumors progress through combined androgen blockade, they retain dependence on the androgen receptor. Many novel agents are in development, some of which have shown dramatic antitumor effects in the earliest phases of clinical testing. Abiraterone blocks the synthesis of androgens; 51% of men who were treated with 1 g of the drug per day had a reduction in PSA levels of at least 50%, and 27% of patients had a partial tumor response. Experimental drug MDV3100 blocks nuclear translocation of the androgen receptor. In a phase 1 and 2 study, antitumor effects were noted at every dose of the agent, including a reduction in PSA levels of at least 50% in 56% of patients, responses in soft-tissue lesions in 22% and in stabilized bone lesions in 56%, and a reduction in circulating tumor-cell counts in 49%.

REACTION:

Cancer is a very sensitive topic for me because my grandfather has stage 4 colon cancer. I know how it feels to lose all hope because until now, there is still no cure for cancer. This study actually made me feel relieved that there are now chemotherapy drugs being manufactured that could just be the cure for cancer. I know it’s too late for my grandfather, but it nice to know that other people will be spared from all heartache of losing a loved one to this disease.

I've heard and read about so many experimental drugs aimed at curing cancer, but so far this has shown the best results! This study seems very promising and I hope that they develop this drug even more so that it can save many lives in the future.

Source:

Dan L. Longo, M.D., "New Therapies for Castration-Resistant Prostate Cancer",The New England Journal of Medicine,http://www.nejm.org/doi/full/10.1056/NEJMe1006300, © 2010

UNIVERSITY OF SAN AGUSTIN
COLLEGE OF NURSING

DIOCENA, NELYN MAE

Body mass index and risk of ovarian cancer

Michael F. Leitzmann MD, DrPH, Corinna Koebnick PhD, Kim N. Danforth PhD, Louise A. Brinton PhD, Steven C. Moore PhD, Albert R. Hollenbeck PhD, Arthur Schatzkin MD, DrPH, James V. Lacey Jr PhD

6 JAN 2009

Abstract

BACKGROUND:

Convincing epidemiologic evidence links excess body mass to increased risks of endometrial and postmenopausal breast cancers, but the relation between body mass index (BMI) and ovarian cancer risk remains inconclusive. Potential similarities regarding a hormonal mechanism in the etiology of female cancers highlight the importance of investigating associations according to menopausal hormone therapy (MHT) use. However, to the authors' knowledge, data addressing whether the relation between BMI and ovarian cancer differs by MHT use are very sparse.

METHODS:

The authors prospectively investigated the association between BMI and ovarian cancer among 94,525 US women who were followed between 1996 through 1997 to December 31, 2003. During 7 years of follow-up, 303 epithelial ovarian cancer cases were documented.

RESULTS:

Compared with normal weight women (BMI of 18.5-24.9 kg/m^2), the multivariate relative risk (MVRR) of ovarian cancer for obese women (BMI of ≥30 kg/m^2) in the cohort as a whole was 1.26 (95% confidence interval [95% CI], 0.94-1.68). Among women who never used MHT, the MVRR for obese versus normal weight women was 1.83 (95% CI, 1.18-2.84). In contrast, no relation between BMI and ovarian cancer was apparent among women who ever used MHT (MVRR = 0.96; 95% CI, 0.65-1.43; P interaction = 0.02). Exploratory analyses also suggested a positive association between BMI and ovarian cancer among women without a family history of ovarian cancer (MVRR comparing obese vs normal weight women = 1.36; 95% CI, 1.00-1.86), but no relation with BMI was apparent among women with a positive family history of ovarian cancer (MVRR = 0.74; 95% CI, 0.34-1.62 [P interaction = .02]).

CONCLUSIONS:

Based on the results of the current study, the authors suspect that obesity is associated with enhanced ovarian cancer risk through a hormonal mechanism. Cancer 2009. Published 2009 by the American Cancer Society.

SUMMARY:

Several studies had been made to find links between increased body mass to increased risks of endometrial and postmenopausal breast cancers. But there has been no evidence found on the link between increased body mass to the increased risks of ovarian cancer.

The study evaluated 94,525 US women who were followed between 1996 through 1997 to December 31, 2003. At baseline in 1996 through 1997, approximately one-third (32.4%) of participants were overweight and nearly one-fourth (22.0%) were obese. Most women were white, postmenopausal, and in their lower 60s at study onset. Ovarian cancer was positively associated with MHT use and family history of ovarian cancer; it was found to be inversely associated with oral contraceptive use, parity, and nonwhite race/ethnicity; and not associated with age at menarche, age at natural menopause, or hysterectomy. Postmenopausal women with hysterectomy were more likely to report use of MHT than postmenopausal women with an intact uterus.

BMI at baseline was associated with a modest but statistically nonsignificant increase in risk for ovarian cancer. However, when the relation between adiposity and ovarian cancer among women who never used MHT was examined, the association became markedly stronger, with the risk among obese women increasing nearly 80% compared with normal weight women. In contrast, no association between BMI and ovarian cancer was observed among ever-users of MHT.

REACTION:

With the invention of machines that make our life and work easier, with the new advances in technology that makes work faster and more enjoyable in the comforts of our homes, people have began to live a sedentary lifestyle. Choosing to stay indoors to watch shows in the televisions, play games with their PSPs and surf the net using laptops and netbooks, instead of staying outdoors and involving themselves in hiking the wild outdoors, playing games out in the sun and exercising. With the way people have been living nowadays, more and more people are becoming obese and thus the risks for diseases such as hypertension and diabetes are increased.

Obesity has become a major problem of the society. With the increased in the body mass index (BMI) of the people, many people have been at risk for hypertension and diabetes. Now, with many women becoming obese, and their BMI increasing, so is their risk for ovarian cancer is increased.

In postmenopausal women excess body mass leads to increased estrogen synthesis. Estrogen promotes cell growth in ovarian surface epithelial cell cultures. High body mass is associated with hyperinsulinemia and, consequently, with higher levels of free circulating insulin-like growth factor (IGF)-1 and androgens. Both IGF-1 and androgens stimulate cell proliferation in ovarian cancer. Obesity is also associated with increased levels of serum leptin, which can act as a mitogen and an angiogenic factorand is involved in ovarian folliculogenesis.

As a student nurse, this study has educated me with the knowledge of how the right body mass index can help you live a healthy and longer life by not putting you at risk for diseases such as hypertension and diabetes and now, ovarian cancer. I can use this knowledge I have learned by educating my clients whom I will encounter in the future, especially the women, on the importance of keeping their weight within normal range and keeping a normal body mass index (BMI). I can also provide my patients and clients health teachings about the importance of living a healthy lifestyle that can be achieved by eating a well balanced meal and making sure that they exercise for a few hours each day.

Of course, I can also impart this knowledge not only to my patients but also to the members of my family, my mother and aunts. For, I can only be more effective in persuading my clients to live a healthy lifestyle if I can persuade the people at my home to also do the same. Also, I have to learn how to practice healthy living myself so that my clients would believe what I say.

SOURCE:

Leitzmann, Michael F., Corinna Koebnick, Louise A. Brinton, Steven C. Moore, Albert R. Hollenbeck, Arthur Schatzkin, and James V. Lacey. "Body Mass Index and Risk of Ovarian Cancer." *Cancer* 115.4 (2009): 812-22. *Wiley Online Library*. 6 Jan. 2009. Web. 15 Aug. 2010. <http://onlinelibrary.wiley.com/doi/10.1002/cncr.24086/full>.

UNIVERSITY OF SAN AGUSTIN
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DORONILA, VERNA

First Ever Skin Cancer Vaccine Trials to Start in Australia Early Next Year

Gopalan

November 16, 2008 at 11:34 AM

First ever skin cancer vaccine trials on humans are to start in Australia early next year.

Professor Ian Frazer, the man behind the cervical cancer vaccine, is also the moving spirit behind the latest vaccine attempt too. He is due to outline his skin cancer breakthrough at the Australian Health and Medical Research Congress in Brisbane tomorrow.

The former Australian of the Year will tell the conference the skin cancer vaccine has been successful in animal testing and it could be available to the public within five to 10 years.

Prof Frazer envisages the vaccine could be given to millions of children between the ages of 10 and 12.

"If we can get encouraging results we will try and push it on as fast as we can," Prof Frazer told News Limited.

"It's really a given that we try to focus on health problems that are significant ones."

But Cancer Australia CEO David Currow has warned that the vaccine will not prevent all skin cancers.

Mr Currow says it could be a revolutionary discovery, but people will still need to be careful.

"As we've seen with cervical cancer, although it may deal with 70 per cent of cancers of the cervix, the vaccine doesn't deal with the other 30 per cent," he said.

"And so it is with a vaccine related to skin cancer. The message is still that one of the most powerful things that we can do is reduce the risk by reducing our exposure to sunlight."

He says the vaccine could prevent some of the 400,000 cases of skin cancer diagnosed in Australia every year, but there is no guarantee.

"The future is sometime off here and even if we get this vaccine in place in the next decade it's absolutely imperative that in the meantime we continue to take a very active stance in managing the risk factors that each of us have control over," he said.

Lisa Naumann from the Cancer Council says it is fantastic news, ABC Online reported.

"This sort of research is a really exciting opportunity for us to see what we can do to combat this really awful disease," she said.

"The Cancer Council is certainly really excited to see what becomes of this vaccine."

SUMMARY:

First ever skin cancer vaccine trials on humans are to start in Australia . Professor Ian Frazer, the man behind the cervical cancer vaccine, is also the moving spirit behind the latest vaccine attempt to. He is due to outline his skin cancer breakthrough at The Australian Health and Medical Research Congress in Brisbane . The skin cancer has been successful in animal testing and it could be available to the public within five to 10 years according to Professor Frazer. The vaccine could be given to millions of children between the ages of 10 and 12. But Cancer Australia CEO David Currow has warned that the vaccine will not prevent all skin cancers. He added that it could be a revolutionary discovery, but people will still need to be careful and that one of the most powerful things to do is to reduce the risk by reducing our exposure to sunlight. Mr. Currow also says that the vaccine could prevent some of the 400,000 cases of the skin cancer diagnosed in Australia every year, but there is no guarantee.

REACTION:

The article talks about the first ever skin cancer vaccine to start in Australia . The man behind the cervical vaccine

is also the man behind the latest skin cancer vaccine who is Professor Ian Frazer.It is nice to know this new discovery since if it would be really successful and is this will be develop, then this would be a great help to everyone to help prevent the development of skin cancer . The skin cancer vaccine cannot prevent all skin cancer types or cases but this could at least a help. I strongly agree to what Mr. Currow said that the skin cancer could be a revolutionary discovery but people will still need to be careful by reducing our exposure to sunlight.

The article implies that as a student nurse, I should limit myself from too much exposure to sunlight specifically to ultraviolet rays since we all know that this cause skin cancer. If ever that the skin cancer vaccine is available, we should not only depend on it, and instead we should limit one's exposure to the sun during the hours of 10 a.m. to 3 p.m. when its rays are more intense. We Filipinos are lucky enough to have brown skin and for this we should be thankful. Brown people have melanocyte that produces more melanin which is a component in the skin that absorbs UV to protect the skin cells from damage.

The said discovery gives us hope and if this becomes successful, soon this will be available in the future years not only in Australia but all over the world.

BIBLIOGRAPHY

http://www.medindia.net/news/First-Ever-Skin-Cancer-Vaccine-Trials-to-Start-in-Australia-Early-Next-Year-44120-2.htmL

UNIVERSITY OF SAN AGUSTIN
COLLEGE OF NURSING

ESCLANA, IRISH MAE

Intensive Care Outcomes in Bone Marrow Transplant Recipients: A Population-based Cohort Analysis

Damon C Scales; Deva Thiruchelvam; Alexander Kiss; William J Sibbald; Donald A Redelmeier

Posted: 08/25/2008; Crit Care. 2008;12(3)

Abstract

Introduction

Intensive care unit (ICU) admission for bone marrow transplant recipients immediately following transplantation is an ominous event, yet the survival of these patients with subsequent ICU admissions is unknown. Our objective was to determine the long-term outcome of bone marrow transplant recipients admitted to an ICU during subsequent hospitalizations.

Methods

We conducted a population-based cohort analysis of all adult bone marrow transplant recipients who received subsequent ICU care in Ontario, Canada from 1 January 2000 to 31 March 2005. The primary endpoint was mortality at 1 year.

Results

A total of 2,653 patients received bone marrow transplantation; 504 of which received ICU care during a

subsequent hospitalization. Patients receiving any major procedure during their ICU stay had higher 1-year mortality than those patients who received no ICU procedure (87% versus 44%, $P < 0.0001$). Death rates at 1 year were highest for those receiving mechanical ventilation (87%), pulmonary artery catheterization (91%), or hemodialysis (94%). In combination, the strongest independent predictors of death at 1 year were mechanical ventilation (odds ratio, 7.4; 95% confidence interval, 4.8 to 11.4) and hemodialysis (odds ratio, 8.7; 95% confidence interval, 2.1 to 36.7), yet no combination of procedures uniformly predicted 100% mortality.

Conclusion

The prognosis of bone marrow transplant recipients receiving ICU care during subsequent hospitalizations is very poor but should not be considered futile.

SUMMARY:

Bone marrow transplantation is a heroic element of therapy for leukemia, lymphoma, and some other devastating diseases. The procedure sometimes yields improved long-term survival, yet it can entail significant morbidity during the initial recovery. About 40% of patients receive intensive care unit (ICU) treatment with the initial transplant. The specific reasons for ICU admission frequently involve pulmonary, hepatic, or neurological dysfunction. In addition to monitoring techniques such as continuous blood pressure recording, ICU care often

involves complicated treatment including mechanical ventilation, renal replacement therapy, and continuous medication infusions. Necessary futile situations require a large sample size to establish that good outcomes are sufficiently infrequent. The detection of survivors in every stratum of the cohort suggests that ICU care for bone marrow transplant recipients should not be considered futile, contrary to popular opinion or economic incentives. Thus, the result of this study can be used to counsel patients and family members about prognosis and guiding ICU care for bone marrow transplant recipients who consider these therapies to be appropriate.

REACTION:

The Intensive Care Unit (ICU) is a very "intense" area and can create a great deal of tension and stress for patients and families. Effective and appropriate communication is an important part of the healing process, not only for the patient, but also for the family. It is a place where in terminally ill people are being admitted for close monitoring. Recipients for bone marrow transplant are being admitted at ICU for the reason that they are prone to infection. Infection remains a major cause of mortality in patients who undergo bone marrow transplant, despite recent advances in supportive care, growth factors, more potent antimicrobials, prophylaxis strategies, and new diagnostic techniques. Once infections occur in a bone marrow recipient, the mortality rate is high. Pathogens that are benign in an immunocompetent host can lead to significant mortality in these patients. The retrospective study lacks information on several factors that might influence

prognosis, such as the specific reason for ICU admission, the degree of acute physiological disturbance, and the use of other ICU procedures or medications. The strength of the study is its large sample size and multicenter recruitment. The extended observation interval also indicates that advances in the care of bone marrow transplant patients may have improved their prognosis in the community.

As a student nurse, I advice the patient and the family to participate in the discussion of the physician before the procedure to be undergone to know the consequences and advantages of having a bone marrow transplant. In addition, monitor the patients situation and attend to their needs is also the responsible of the health care professional.

BIBLIOGRAPHY:

Damon C Scales, et. al, "Intensive Care Outcomes in Bone Marrow Transplant Recipients: A Population-based Cohort Analysis". Posted: August 25, 2008, Retrieved: August 15, 2010. http://www.medscape.com.

UNIVERSITY OF SAN AGUSTIN
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ESTRELLADO, ERICKA JANE

Breast Cancer after Use of Estrogen plus Progestin in Postmenopausal Women

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THE NEW ENGLAND JOURNAL OF MEDICINE

ABSTRACT

Background

Following the release of the 2002 report of the Women's Health Initiative (WHI) trial of estrogen plus progestin, the use of menopausal hormone therapy in the United States decreased substantially. Subsequently, the incidence of breast cancer also dropped, suggesting a cause-and-effect relation between hormone treatment and breast cancer. However, the cause of this decrease remains controversial.

Objective/Purpose:

To determine the cause in the decreased incidence of breast cancer following the decreased in the use of estrogen plus progestin hormones in post-menopausal women.

Methods

We analyzed the results of the WHI randomized clinical trial — in which one study group received 0.625 mg of conjugated equine estrogens plus 2.5 mg of medroxyprogesterone acetate daily and another group received placebo — and examined temporal trends in breast-cancer diagnoses in the WHI observational-study cohort. Risk factors for breast cancer, frequency of mammography, and time-specific incidence of breast cancer were assessed in relation to combined hormone use.

Results

In the clinical trial, there were fewer breast-cancer diagnoses in the group receiving estrogen plus progestin than in the placebo group in the initial 2 years of the study, but the number of diagnoses increased over the course of the 5.6-year intervention period. The elevated risk decreased rapidly after both groups stopped taking the study pills, despite a similar frequency of mammography. In the observational study, the incidence of breast cancer was initially about two times as high in the group receiving menopausal hormones as in the placebo group, but this difference in incidence decreased rapidly in about 2 years, coinciding with year-to-year reductions in combined hormone use. During this period, differences in the frequency of mammography between the two groups were unchanged.

Conclusions

The increased risk of breast cancer associated with the use of estrogen plus progestin declined markedly soon after discontinuation of combined hormone therapy and was unrelated to changes in frequency of mammography.

SUMMARY:

Breast Cancer after Use of Estrogen plus Progestin in Postmenopausal Women was a study conducted by Chlebowski et al, which aimed to determine cause in the decreased incidence of breast cancer following the decreased in the use of estrogen plus progestin hormones in post-menopausal women. They analyzed the results of the clinical trial conducted by Women's Health Inititiave in which one study group received 0.625 mg of conjugated equine estrogens plus 2.5 mg of medroxyprogesterone acetate daily and another group received placebo. Results showed that reducing the pills, despite the similar frequency of mammography, also reduces the risk of having breast cancer on post-menopausal women in the study. Hence, the risks of breast cancer associated with the use of estrogen plus progestin declined markedly after discontinuation of this combined hormone therapy despite unchanged frequency in mammography.

REACTION:

This study entitled Breast Cancer after Use of Estrogen plus Progestin in Postmenopausal Women made a new and additional avenue on my learning on breast cancer, its risk factors and its management. As a nursing student, I have known that estrogen and progesterone levels decreases on

the onset of menopause. So, women needs for the replacement of these hormones. However, I was in awe to learn that these combined-hormone therapies may increase the risks of breast cancer among post-menopausal women. A nurse have known that these hormonal therapy is a replacement for the loss of estrogen and progesterone when women have reached its menopausal stage, so this study would imply precautionary measures should be done. These would include thorough history taking, which would determine familial diseases such as cancer, and a solid and concrete assessment in addition to mammography. Accordingly, it was difficult for me as a female and a future nurse to discern that estrogen and progesterone are two hormones that may put women in increase risks of having breast cancer. It is beneficial in the early stage of life yet, in the later years it would be factor for you be at risk to breast cancer, which is if you are receiving estrogen-progesterone therapy on your pre- and post-menopausal stage. I am thankful that an observational study on the effects of these hormones on occurrence of breast cancer was conducted by the authors. It was a big help on how to prevent and control breast cancer's prevalence.

BIBLIOGRAPHY:

Rowan T. Chlebowski, M.D., Ph.D., et al, Breast Cancer after Use of Estrogen plus Progestin in Postmenopausal Women, THE NEW ENGLAND JOURNAL OF MEDICINE, HTTP://WWW.NEJM.ORG/DOI/PDF/10.1056/NEJMOA0807684, FEBRAURY 5, 2009

FLORES, CAREN DAWN

Health food store recommendations: implications for breast cancer patients

Edward Mills, Edzard Ernst, Rana Singh, Cory Ross and Kumanan Wilson

Published online March 19, 2007

Abstract

Background

Many breast cancer patients use complementary and alternative medicine (CAM). We aimed to determine what advice health food store employees present to individuals seeking treatment options for breast cancer.

Methods

Eight data gatherers asked employees of all retail health food stores in a major Canadian city, what they recommended for a patient with breast cancer. The data gatherers inquired about product safety, potential drug interactions, costs and efficacy. They also enquired about employee training related to the products.

Results

Thirty-four stores were examined. A total of 33 different products were recommended, none of which are supported by sufficient evidence of efficacy. The average cost of the products they recommended was $58.09 (CAD) (minimum $5.28, median $32.99, maximum $600) per month. Twenty-three

employees (68%) did not ask whether the patient took prescription medications. Fifteen employees (44%) recommended visiting a healthcare professional (naturopaths (9), physicians (5), nutritionists (1). Three employees (8.8%) discussed potential adverse effects of the products. Eight employees (23.5%) discussed the potential for drug interactions. Two employees (5.9%) suggested a possible cure with the products and one employee (2.9%) suggested discontinuing Tamoxifen. Four employees (11.8%) recommended lifestyle changes and three employees (8.8%) recommended books for further reading on the products.

Conclusion

This study draws attention to the heterogeneity of advice provided by natural health food stores to individuals seeking treatments for breast cancer, and the safety and cost implications of some of the products recommended. Physicians should enquire carefully about the use of natural health food products by patients with breast cancer. Regulators need to consider regulations to protect vulnerable patients from incurring significant costs in their purchasing of natural health food products lacking evidence of benefit and of questionable safety.

SUMMARY:

Some good food-based sources of important vitamins and nutrients for people with cancer:

- Eggs and nuts are great sources of B-complex vitamins, vitamin E, and protein. Egg yolks are a good source of

vitamin D. Peanut butter and crackers are an easy, no-prep snack that pack nutrients and may be easier to keep down.

- Milk, cheese, meat, fish, and poultry are also good sources of B-complex vitamins, as well as protein. If you're having trouble eating hot dishes (the aroma of cooking food can sometimes trigger chemotherapy-related nausea), snack on mild cheeses, ice cream, yogurt, and other cold snacks. For larger meals, try chilled dishes like chicken, egg, and tuna salad.
- Beans and other legumes offer plenty of B vitamins while helping meet your protein needs as well.
- Since chemo-related mouth sores may make it painful to drink citrus juices or eat citrus fruits, which are the most common sources of vitamin C, consider alternative fruits and juices. "Peach and pear nectars, as well as applesauce, are good alternative ways to get vitamin C," Scroggs says.
- Green, leafy vegetables, of course, are great sources of vitamins like A, E, and K, as well as minerals like iron. Be sure to wash all fruits and vegetables carefully; your immune system can be compromised by cancer treatment and susceptible to contaminants in food.

REACTION:

Cancer treatments like chemotherapy and radiation can leave you dehydrated. Some drugs can also cause kidney damage if they're not flushed out of your system, so during cancer treatment, it's particularly important to get enough fluids. Adequate hydration can't be supplied by a healthy

diet alone," says Deng. "Along with drinking more water, patients should try sports drinks, like Gatorade, and other nutritional drinks.

Some people find it hard to drink enough water (chemotherapy can even make water taste strange), so Deng suggests getting some of your fluid intake through soups. For some people, the added flavor of something like chicken noodle soup may make it easier to get the liquid down.

Chicken soup has another benefit: It boosts your electrolytes (the collective term for minerals such as sodium, potassium, chloride, calcium, and magnesium), which can often be depleted by the side effects of treatment. It's very important to make sure that you have adequate electrolyte intake. Gatorade and other sports drinks also help maintain your electrolyte balance.

The bottom line, don’t get fixated on any one particular substance. There's no magic food or magic supplement. Nothing beats a well-balanced, diverse diet. This is what I should tech my patients.

BIBLIOGRAPHY:

UNIVERSITY OF SAN AGUSTIN
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GADDI, MA. AILYN

Lung cancer risk in never-smokers: a population-based case-control study of epidemiologic risk factors

Darren R Brenner, Rayjean J Hung, Ming-Sound Tsao, Frances A Shepherd, Michael R Johnston, Steven Narod, Warren Rubenstein[6] and John R McLaughlin

BMC Cancer 2010, **10:**285doi:10.1186/1471-2407-10-285\

14 June 2010

Abstract

Background

We conducted a case-control study in the greater Toronto area to evaluate potential lung cancer risk factors including environmental tobacco smoke (ETS) exposure, family history of cancer, indoor air pollution, workplace exposures and history of previous respiratory diseases with special consideration given to never smokers.

Methods

445 cases (35% of which were never smokers oversampled by design) between the ages of 20-84 were identified through four major tertiary care hospitals in metropolitan Toronto between 1997 and 2002 and were frequency matched on sex and ethnicity with 425 population controls and 523 hospital controls. Unconditional logistic regression models were used to estimate adjusted odds ratios (OR) and 95% confidence intervals (CI) for the associations between exposures and lung cancer risk.

Results

Any previous exposure to occupational exposures (OR total population 1.6, 95% CI 1.4-2.1, OR never smokers 2.1, 95% CI 1.3-3.3), a previous diagnosis of emphysema in the total population (OR 4.8, 95% CI 2.0-11.1) or a first degree family member with a previous cancer diagnosis before age 50 among never smokers (OR 1.8, 95% CI 1.0-3.2) were associated with increased lung cancer risk.

Conclusions

Occupational exposures and family history of cancer with young onset were important risk factors among never smokers.

SUMMARY:

This study was conducted in the greater Toronto area to evaluate potential lung cancer risk factors including environmental tobacco smoke (ETS) exposure, family history of cancer, indoor air pollution, workplace exposures and history of previous respiratory diseases with special consideration given to never smokers. 445 cases (35% of which were never smokers oversampled by design) between the ages of 20-84 were identified through four major tertiary care hospitals in metropolitan Toronto between 1997 and 2002 and were frequency matched on sex and ethnicity with 425 population controls and 523 hospital controls. As a result, any previous exposure to occupational exposures, a previous diagnosis of emphysema in the total population or a first degree family member with a previous cancer diagnosis before age 50 among never smokers were associated

with increased lung cancer risk. Occupational exposures and family history of cancer with young onset were important risk factors among never smokers.

REACTION:

This study is all about the factors such as environmental tobacco smoke (ETS) exposure, family history of cancer, indoor air pollution, workplace exposures and history of previous respiratory diseases that plays a prominent role in lung cancer development in non-smokers.

Lung cancer is one of the most preventable types of cancer. By avoiding certain risk factors for lung cancer, we can reduce our chances of developing it. As a nursing student, I could be of help to other people through giving health teachings about the factors that causes lung diseases such as lung cancer and on how to prevent having it. There were several ways in order to prevent lung cancer. Quit smoking – NOW! Smoking is the number one risk factor for lung cancer. Quitting smoking is the best defense against lung cancer. Encourage them to have a plenty of rest, moderate physical activity and a balance and healthy diet that includes fresh fruits and vegetables because this are rich with antioxidants and flavonoids. Antioxidants and flavonoids help protect cell's DNA and repair damaged cells. For non-smokers, they should know what they are being exposed to in the workplace. Chemicals, gasoline, diesel exhaust, arsenic,coal products, mustard gas, and chloromethyl ethers are all carcinogens (agents causing cancer) and can be found in some work environments. They should also keep away from secondhand smoke. This smoke

also contains carcinogens. These carcinogens interrupt normal cell development which interference of cell development what starts the cancer process. Lung cancer could be prevented through action and awareness. Avoiding cancer risk factors, and increasing protective factors play a big role in order to prevent lung cancer. We should always remember that a healthy lifestyle could definitely lead to a healthy mind and body.

SOURCE:

http://www.biomedcentral.com/1471-2407/10/285/abstract

UNIVERSITY OF SAN AGUSTIN
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GALENO, NORALYN

Genetics of Pigmentation in Skin Cancer

Scherer D, Kumar R.

Abstract

Skin pigmentation is one of the most overt human physical traits with consequences on susceptibility to skin cancer. The variations in skin pigmentation are dependent on geographic location and population ethnicity. Skin colouration is mainly due to the pigmentation substance melanin, produced in specialized organelles (melanosomes) within dendritic melanocytes, and transferred to neighbouring keratinocytes. The two types of melanin synthesized in well defined chemical reactions are the protective dark coloured eumelanin and the sulphur containing light red-yellow pheomelanin. The events leading to the synthesis of melanin are controlled by signalling cascades that involve a host of genes encoding ligands, receptors, transcription factors, channel transporters and many other crucial molecules. Several variants within the genes involved in pigmentation have been associated with high risk phenotypes like fair skin, brown-red hair and green-blue eyes. Many of those variants have also been implicated in the risk of various skin cancers. The variants within the key pigmentation gene, melanocortin-receptor 1 (MC1R), in particular have been ubiquitously linked with high risk traits and skin cancers involving both pigmentary and non-pigmentary functions and likely interaction with variants in other genes. Many of the variants in other genes, functional in pigmentation

pathway, have also been associated with phenotypic variation and risk of skin cancers. Those genes include agouti signalling protein (ASIP), tyrosinase (TYR), tyrosinase-related protein 1 (TYRP1), oculocutaneous albinism II (OCA2), various solute carrier genes and transporters. Most of those associations have been confirmed in genome wide association studies that at the same time have also identified new loci involved in phenotypic variation and skin cancer risk. In conclusion, the genetic variants within the genes involved in skin pigmentation besides influencing phenotypic traits are important determinants of risk of several skin cancers. However, ultimate risk of skin cancer is dependent on interplay between genetic and host factors.

SUMMARY:

The ability of cells to respond to and to mitigate environmental stress is crucial for their survival. Constitutive and facultative pigmentation have evolved in order for human skin to contend with high levels of terrestrial ultraviolet radiation (UVR). When this melanin 'shield' is compromised, individuals are exposed to increased skin cancer risk. The purpose of this review is to discuss new insights into the genetic basis of phenotypic risk factors for skin cancer, their connection to pigmentation and tanning, the precise molecular connections linking UVR to the tanning response, and potential methods of modulating pigmentation that avoid genotoxic damage. Highly translational implications of this research include a scientific basis on which to counsel patients regarding the carcinogenicity of UVR exposure related to tanning and potential new tanning agents that may actually protect against skin cancer by circumventing the need for UVR exposure.

REACTION:

Ultraviolet radiation has numerous effects on the skin including photoaging, immune suppression, DNA damage and tanning. Its role as a carcinogen in the development of basal cell carcinom, squamous cell carcinoma and cutaneous malignant melanoma has been reviewed elsewhere. Numerous phenotypic features are well-known risk factors for skin cancer, including several related to pigmentation. This

review will highlight recent studies identifying novel genetic loci, both in mice and in humans that appear to be linked to pigmentation and cancer risk. Next, studies involving the precise signalling network from DNA damage to tanning are presented as many of the aforementioned pigmentation loci are present in a tightly regulated signalling cascade which appears to govern response to UVR and dictates skin cancer susceptibility. Finally, brief mention is made of several pharmacological opportunities to harness the tanning mechanisms at a point downstream of DNA damage, which may provide a safe and perhaps even beneficial means to recover eumelanization.

It is known that individuals who tan well suffer less DNA damage, but these recent studies suggest that all tanning is a physical manifestation of DNA damage. Basal pigmentation thus appears to be a successful adaptive response as it does protect against skin cancer development. However, tanning is at best imperfect as it is a damage response that erodes with repeated exposures and that does not prevent subsequent DNA injury. Furthermore, it stands to reason that individuals unable to tan because of nonfunctional MC1R variants could suffer even more DNA damage as they lack even this imperfect response. Taken together, the newly recognized molecular link between DNA damage and tanning via an axis involving Mc1r signalling strongly suggests that intentional tanning, with any UVR, leads to irreparable genetic damage. It is indeed gratifying that our understanding of the relationship between UVR and skin cancer risk has rapidly progressed since the first experiments showing the carcinogenity of UVR in mice. The genetic basis of the ‘sun-sensitive’

phenotype and the mechanistic contribution towards skin cancer risk is becoming clearer. It now appears that key tumour suppressor is a central player in at least two distinct, protective UVB-responsive pathways: the mediated tanning response pathway and the DNA repair pathway. Increased knowledge of the pigmentation or DNA repair network will undoubtedly lead to new insights regarding the genetic determinants of cancer risk, preventive measures, and approaches to novel therapies. Finally, there is recent evidence that the protective adaptation of tanning in response to UVR comes at the cost of DNA damage, which may be side-stepped by new pharmacological stimulators of pigmentation.

BIBLIOGRAPHY:

Scherer D, **Kumar R**., "Genetics of Pigmentation in Skin Cancer", PUBMED., JUNE 30, 2010

UNIVERSITY OF SAN AGUSTIN
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GREGORIOS, BEVERLY JOAN

Vitamin D and calcium supplementation reduces cancer risk: results of a randomized trial

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[1] From the Osteoporosis Research Center, Creighton University, Omaha, NE

American Journal of Clinical Nutrition, Vol. 85, No. 6, 1586-1591, June 2007

Background

Numerous observational studies have found supplemental calcium and vitamin D to be associated with reduced risk of common cancers. However, interventional studies to test this effect are lacking.

Objective

The purpose of this analysis was to determine the efficacy of calcium alone and calcium plus vitamin D in reducing incident cancer risk of all types.

Design

This was a 4-y, population-based, double-blind, randomized placebo-controlled trial. The primary outcome was fracture incidence, and the principal secondary outcome was cancer incidence. The subjects were 1179 community-dwelling women randomly selected from the population of healthy

postmenopausal women aged >55 y in a 9-county rural area of Nebraska centered at latitude 41.4°N. Subjects were randomly assigned to receive 1400–1500 mg supplemental calcium/d alone (Ca-only), supplemental calcium plus 1100 IU vitamin D_3/d (Ca + D), or placebo.

Results

When analyzed by intention to treat, cancer incidence was lower in the Ca + D women than in the placebo control subjects ($P < 0.03$). With the use of logistic regression, the unadjusted relative risks (RR) of incident cancer in the Ca + D and Ca-only groups were 0.402 ($P = 0.01$) and 0.532 ($P = 0.06$), respectively. When analysis was confined to cancers diagnosed after the first 12 mo, RR for the Ca + D group fell to 0.232 (CI: 0.09, 0.60; $P < 0.005$) but did not change significantly for the Ca-only group. In multiple logistic regression models, both treatment and serum 25-hydroxyvitamin D concentrations were significant, independent predictors of cancer risk.

Conclusions

Improving calcium and vitamin D nutritional status substantially reduces all-cancer risk in postmenopausal women. This trial was registered at clinicaltrials.gov as NCT00352170.

SUMMARY:

This is intended to know if Vitamin C and calcium reduces risk of having cancer. Garland were the first to propose that vitamin D was responsible, specifically for the association with colon cancer. The inverse association between ambient solar radiation and cancer mortality rates has subsequently been described for cancers of the breast, rectum, ovary, prostate, stomach, bladder, esophagus, kidney, lung, pancreas, and uterus, as well as for non-Hodgkin lymphoma and multiple myeloma. The primary design endpoints of the study concerned skeletal status and the calcium economy. These outcomes will be described elsewhere. Here, we present data related solely to a secondary endpoint, incident cancers. Health status was assessed at 6-mo intervals during the course of the study. When a participant reported that a diagnosis of cancer had been made in the interval between assessments, the medical record was examined to confirm that diagnosis and to establish the primary site. The date of diagnosis was used to time the occurrence of cancer in subsequent analyses.

REACTION:

Cancer affects people at all ages with the risk for most types increasing with age. Cancer caused about 13% of all human deaths in 2007. It is known to be one of the most dangerous type of disease which slowly kills you. Cancer affects people in all ages. Even an unborn child could

inherit it genetically. Before, cancer could be like AIDS, it is incurable and medical experts would find it hard to examined it but as of now, due to modernized technologies, this could be easily detected and this could be prevented. There are so many easy ways of preventing cancer and one of which is to lessen or eradicate processed foods from the diet but instead choose natural and nutritious foods and even your daily vitamins could help lessen your risk of having it.

This research greatly helps us to prevent cancer for we know it affects people in all ages. For the medical team, it would be such a great help because for example for us student nurses, we could advised our patients or even do health teaching in the prevention of this deadly disease. It is an advantage for them and for us also because we can be of great help to them.

BIBLIOGRAPHY

Vitamin D and calcium supplementation reduces cancer risk: results of a randomized trial. American Journal of Clinical Nutrition, Vol. 85, No. 6, 1586-1591, June 2007
http://www.ajcn.org/cgi/content/abstract/85/6/1586

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IMPE, MARIAN HOPE

Altered serotonin physiology in human breast cancers favors paradoxical growth and cell survival

Vaibhav P Pai, Aaron M Marshall, Laura L Hernandez, Arthur R Buckley and Nelson D Horseman

Breast Cancer Research 2009, **11**:R81doi:10.1186/bcr2448

Abstract

Introduction

The breast microenvironment can either retard or accelerate the events associated with progression of latent cancers. However, the actions of local physiological mediators in the context of breast cancers are poorly understood. Serotonin (5-HT) is a critical local regulator of epithelial homeostasis in the breast and other organs. Herein, we report complex alterations in the intrinsic mammary gland serotonin system of human breast cancers.

Methods

Serotonin biosynthetic capacity was analyzed in human breast tumor tissue microarrays using immunohistochemistry for tryptophan hydroxylase 1 (TPH1). Serotonin receptors (5-HT1-7) were analyzed in human breast tumors using the Oncomine database. Serotonin receptor expression, signal transduction, and 5-HT effects on breast cancer cell phenotype were compared in non-transformed and transformed human breast cells.

Results

In the context of the normal mammary gland, 5-HT acts as a physiological regulator of lactation and involution, in part by favoring growth arrest and cell death. This tightly regulated 5-HT system is subverted in multiple ways in human breast cancers. Specifically, TPH1 expression undergoes a non-linear change during progression, with increased expression during malignant progression. Correspondingly, the tightly regulated pattern of 5-HT receptors becomes dysregulated in human breast cancer cells, resulting in both ectopic expression of some isoforms and suppression of others. The receptor expression change is accompanied by altered downstream signaling of 5-HT receptors in human breast cancer cells, resulting in resistance to 5-HT-induced apoptosis, and stimulated proliferation.

Conclusions

Our data constitutes the first report of direct involvement of 5-HT in human breast cancer. Increased 5-HT biosynthetic capacity accompanied by multiple changes in 5-HT receptor expression and signaling favor malignant progression of human breast cancer cells (for example, stimulated proliferation, inappropriate cell survival). This occurs through uncoupling of serotonin from the homeostatic regulatory mechanisms of the normal mammary epithelium. The findings open a new avenue for identification of diagnostic and prognostic markers, and valuable new therapeutic targets for managing breast cancer.

SUMMARY:

The abstract research was all about "Altered serotonin physiology in human breast cancers favors paradoxical growth and cell survival". The breast microenvironment can either retard or accelerate the events associated with progression of latent cancers. The method used is serotonin biosynthetic capacity was analyzed in human breast tumor tissue microarrays using immunohistochemistry for tryptophan hydroxylase 1 (TPH1). Serotonin receptors (5-HT1-7) were analyzed in human breast tumors using the Oncomine database. Serotonin receptor expression, signal transduction, and 5-HT effects on breast cancer cell phenotype were compared in non-transformed and transformed human breast cells. The researcher concluded that there is a direct involvement of 5-HT in human breast cancer. Increased 5-HT biosynthetic capacity accompanied by multiple changes in 5-HT receptor expression and signaling favor malignant progression of human breast cancer cells (for example, stimulated proliferation, inappropriate cell survival). This occurs through uncoupling of serotonin from the homeostatic regulatory mechanisms of the normal mammary epithelium. The findings open a new avenue for identification of diagnostic and prognostic markers, and valuable new therapeutic targets for managing breast cancer.

REACTION:

After reading the abstract research about "Altered serotonin physiology in human breast cancers favors paradoxical growth and cell survival". I learned that although cancers generally are clonal and may rely on self-renewing stem cells over the long term, any given tumor

must become heterotypic if it is to reach a substantial size and pathophysiologic complexity. The cancer consists of a community of cells that contribute different pathophysiological properties. The heterotypic nature of a cancer is responsible for its ability to adapt to a changing microenvironment during progression through invasiveness and metastasis. Among the different cell types within a cancer, there are presumably differences in the components and functionality of the 5-HT system. As a student nurse, I should always monitor the health of my client especially with breast cancer because it has so many complications. I should always closely observe my client for any untoward signs and symptoms that will threaten the life of my client and I should refer it to the physician for immediate action. Lastly, I should ensure the safety of my client to avoid any further injury that could cause harm to her.

BIBLIOGRAPHY:

Altered serotonin physiology in human breast cancers favors paradoxical growth and cell survival, http://breast-cancer-research.com/content/11/6/R81, *Breast Cancer Research* 2009

JUCABAN, FRANCES LISETTE

Fecal cytology in conjunction with immunofecal occult blood test for colorectal cancer screening

Sheng JQ, Li SR, Su H, Li JS, Sun ZQ, Wu ZT, Wu X, Xia CH, Rao J.

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Abstract

OBJECTIVE

To develop a simple method to extract and analyze the cytomorphology of epithelial cells from fecal samples and to compare the efficacy of fecal cytology with the immunofecal occult blood test (IFOBT) in colorectal cancer screening.

STUDY DESIGN

Fecal cytology and IFOBT were performed on fecal samples obtained from 41 patients with colorectal cancer; 34 patients with a small, single adenoma (<0.5 cm); and 20 without abnormality. The samples were obtained prior to colonoscopic examination. For fecal cytology, epithelial cells were exacted through filtration, centrifugation and cytocentrifugation and stained with hematoxylin-eosin prior to morphologic analysis.

RESULTS

Fecal cytology and IFOBT test had similar levels of sensitivity for detecting colorectal cancer (75.6% vs. 68.3%, respectively), but fecal cytology had higher specificity than IFOBT (100% as compared to 85.2%, respectively, $p<0.05$ by chi2 test). Seven of 41 colorectal cancer patients (17.1%) with negative IFOBT were positive by fecal cytology analysis. Combining fecal cytology with the IFOBT test in an either/or scenario significantly increased the sensitivity of IFOBT test to 92.68% for colorectal cancer detection ($p<0.05$ by chi2 test) without compromising the specificity.

CONCLUSION

Fecal cytology augments the sensitivity of IFOBT in detecting colorectal cancers, and combining fecal cytology and IFOBT may provide an important simple and cost-effective alternative for colon cancer screening.

SUMMARY:

The research study aims to develop a simple method to extract and analyze the cytomorphology of epithelial cells from fecal samples and to compare the efficacy of fecal cytology with the immunofecal occult blood test (IFOBT) in colorectal cancer screening. Fecal samples were obtained and fecal cytology and IFOBT were performed. The participants of this study are patients with colorectal cancer, patients with small adenoma (< 0.5cm), and patients without abnormalities. The results showed that both tests had similar level of sensitivity for detecting colorectal cancer. But, fecal cytology had higher specificity than IFOBT. The research study concludes that the combination of fecal cytology and IFOBT may provide a simple and cost-effective alternative for colon-cancer screening.

REACTION:

Cancer is a malignant and invasive growth or tumor, esp. one originating in epithelium, tending to recur after excision and to metastasize to other sites. Colorectal cancer is also called cancer of the colon or rectum. It is more common in people over 50 years of age.

Colorectal cancer is common nowadays, and a lot of people die because of such disease. Early detection, awareness, and prevention could prevent its occurrence and complications.

This research gave us information regarding new or alternative screening tests for colon cancer. The research abstract stated that combining fecal cytology and

immunofecal occult blood test (IFOBT) may be another effective way for screening colorectal cancer. These tests are also cost-effective and are not that expensive, so people who are at higher risk of colorectal cancer may undergo such screening tests and prevent its occurrence and may have treatment at an early stage.

This research is of great help in the medical field. New discoveries of screening tests and prevention measures are of great help since they avoid the occurrence and prevalence of the disease. This research study also helps us understand more about the screening tests that are done to our patients. In the nursing field, knowing the case of the patients and those at risk for colorectal cancer, we could anticipate that the doctor will order for such screening tests. As such, we could help our patients prepare and educate them of what they should do.

As student nurses, we are made more aware of the possible screening tests and prevention measures. Since cancer is common nowadays, we could educate our clients regarding cancer. We could inform them on how to prevent its occurrence, the screening tests and inform them of who are at high risk of developing such illness. We could also educate them of the signs and symptoms of the said illness. We should also encourage them to seek medical help immediately if they experience the cardinal signs of cancer for early detection and early treatment to avoid complications.

I suggest that people who at higher risk of colorectal cancer should undergo screening tests such as fecal cytology and IFOBT especially if they experience changes in

their bowel movement and other signs of cancer. I also suggest that people should be made more aware of cancer, and its signs and symptoms. This is for early detection and treatment, prevention of complications, and promotion of life and wellness.

BIBLIOGRAPHY:

Sheng JQ, at al. 'Fecal cytology in conjunction with immunofecal occult blood test for colorectal cancer screening' 2010 [Online] Available <http://www.ncbi.nlm.nih.gov/pubmed/20701065> (August 14, 2010)

UNIVERSITY OF SAN AGUSTIN
COLLEGE OF NURSING

LLENOS, MARY GRACE ANTONETTE

Specialty Supplements and Breast Cancer Risk in the VITamins And Lifestyle (VITAL) Cohort

Theodore M. Brasky, Johanna W. Lampe, John D. Potter, Ruth E. Patterson and Emily White

Background

Use of nonvitamin, nonmineral "specialty" supplements has increased substantially over recent decades. Several supplements may have anti-inflammatory or anticancer properties. Additionally, supplements taken for symptoms of menopause have been associated with reduced risk of breast cancer in two case-control studies. However, there have been no prospective studies of the association between the long-term use of these supplements and breast cancer risk.

Methods

Participants were female members of the VITamins And Lifestyle (VITAL) Cohort. Postmenopausal women, ages 50 to 76 years, who were residents of western Washington State, completed a 24-page baseline questionnaire in 2000 to 2002 (n = 35,016). Participants were queried on their recency (current versus past), frequency (days/week), and duration (years) of specialty supplement use. Incident invasive breast cancers (n = 880) from 2000 to 2007 were obtained from the Surveillance, Epidemiology, and End Results registry. Multivariable-adjusted hazards ratios (HR) and 95% confidence intervals (95% CI) were estimated by Cox proportional hazards models.

Results

Current use of fish oil was associated with reduced risk of breast cancer (HR, 0.68; 95% CI, 0.50-0.92). Ten-year average use was suggestive of reduced risk (*P* trend = 0.09). These results held for ductal but not lobular cancers. The remaining specialty supplements were not associated with breast cancer risk: Specifically, use of supplements sometimes taken for menopausal symptoms (black cohosh, dong quai, soy, or St. John's wort) was not associated with risk.

Conclusions

Fish oil may be inversely associated with breast cancer risk.

SUMMARY:

Research is about the use of nonvitamin, nonmineral "specialty" supplements and its association with cancer. Participants were female members of the VITamins And Lifestyle Cohort, postmenopausal women ages 50 to 76 years, who were residents of western Washington State. They were tasked to answer a 24 page questionnaire that tackles on their past, current; frequency and duration of specialty supplement use. Findings showed that use of fish oil and other specialty supplements were associated with reduced risk of breast cancer.

REACTION:

Department of Health says breast cancer is the leading cause of cancer deaths and leading cause of cancer among women in the Philippines.

I think one of the possible causes of high prevalence of breast cancer in the country is poor blood circulation, restricted blood circulation in the breast area due to wearing of brassieres, bras. Human beings were not meant to wear bras. Push up bras became popular to give the illusion that the Filipina has larger breasts. The research study concluded that fish oil may be inversely associated with breast cancer risk.

I remember, a clinical instructor mentioned that he is taking fish oil and that in a way help him in his daily work (lectures, walking up and down a 3 storey building 3-4 times a day, walking back and forth Gamboa hall to Mendel hall and never-ending errands) and as I further surf the

net I saw the article entitled: 'Do you supplement your diet with fish oil? Cancer suffers should. Why?' It shows different studies that link fish oil intake to cancer risk reduction.

I will suggest that the government enhance free mammography services and fine needle aspiration biopsy alongside improved education campaigns among women to promote early detection. In addition may I say omega 3 supplement containing fish oil in the diet.

BIBLIOGRAPHY:

Brasky, Theodore M., et al. (2010). Specialty Supplements and Breast Cancer Risk in the VITamins And Lifestyle (VITAL) Cohort. Retrieved August 15, 2010 from http://cebp.aacrjournals.org/content/19/7/1696.abstract

UNIVERSITY OF SAN AGUSTIN
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MONTANA, KAREN VIOCIL

Lung Cancer in Never Smokers: Clinical Epidemiology and Environmental Risk Factors

Jonathan M. Samet1, Erika Avila-Tang1, Paolo Boffetta2, Lindsay M. Hannan3, Susan Olivo-Marston4, Michael J. Thun3 and Charles M. Rudin1

September 15, 2009

Abstract

More than 161,000 lung cancer deaths are projected to occur in the United States in 2008. Of these, an estimated 10 to 15% will be caused by factors other than active smoking, corresponding to 16,000 to 24,000 deaths annually. Thus lung cancer in never smokers would rank among the most common causes of cancer mortality in the United States if considered as a separate category. Slightly more than half of the lung cancers caused by factors other than active smoking occur in never smokers. As summarized in the accompanying article, lung cancers that occur in never smokers differ from those that occur in smokers in their molecular profile and response to targeted therapy. These recent laboratory and clinical observations highlight the importance of defining the genetic and environmental factors responsible for the development of lung cancer in never smokers. This article summarizes available data on the clinical epidemiology of lung cancer in never smokers, and several environmental risk factors that population-based research has implicated in the etiology of these

cancers. Primary factors closely tied to lung cancer in never smokers include exposure to known and suspected carcinogens including radon, second-hand tobacco smoke, and other indoor air pollutants. Several other exposures have been implicated. However, a large fraction of lung cancers occurring in never smokers cannot be definitively associated with established environmental risk factors, highlighting the need for additional epidemiologic research in this area. (Clin Cancer Res 2009;15(18):5626–45)

SUMMARY:

Thus lung cancer in never smokers would rank among the most common causes of cancer mortality in the United States if considered as a separate category. Slightly more than half of the lung cancers caused by factors other than active smoking occur in never smokers. As summarized in the accompanying article, lung cancers that occur in never smokers differ from those that occur in smokers in their molecular profile and response to targeted therapy.

Primary factors closely tied to lung cancer in never smokers include exposure to known and suspected carcinogens including radon, second-hand tobacco smoke, and other indoor air pollutants

REACTION:

Researchers believe that second hand smoke plays a prominent role in lung cancer development in non-smokers.

Limiting first hand and second hand exposure is essential for both men and women to reducing the risk factor for lung cancer.

Lung cancer can develop because of radon in bedded in dirt below residential homes. Tests are available to check the radon level in and around your home. Many of these tests are available free of charge from you local health department.

Estrogen may also be a factor in lung cancer development, just like in breast cancer development in women. Studies suggest that blocking estrogen may prevent lung cancer from growing.

Genetics may also be responsible for lung cancer development. Researchers have found genes that can greatly increase the risk factor for lung cancer development. This finding may explain why people who smoke 3 packs a day may never develop lung cancer, while one who only smokes 5 a day develops it. It may be a matter of who is carrying this gene.

BIBLIOGRAPHY:

Samet, Jonathan M. et. Al., "Lung Cancer in Never Smokers: Clinical Epidemiology and Environmental Risk Factors". Clinical Cancer Research. 2009;15(18):5626-45)

UNIVERSITY OF SAN AGUSTIN
COLLEGE OF NURSING

MONTECLARO, MA. DONNALYN

Fatalistic Beliefs about Cancer Prevention and Three Prevention Behaviors

Cancer Epidemiol Biomarkers

February 13, 2007

Abstract

Background

A substantial proportion of US adults hold fatalistic beliefs about cancer prevention. Although evidence suggests that fatalistic beliefs discourage people from engaging in screening behaviors that can reduce their cancer risk, far less is known about associations between cancer fatalism and other prevention behaviors. We examined sociodemographic correlates of these beliefs and their associations with regular exercise, smoking, and fruit and vegetable consumption with a national sample of American adults.

Methods

Data were analyzed from the first wave of the Health Information National Trends Survey (HINTS 2003). HINTS used random-digit dialing to complete phone interviews with adult Americans (N = 6,369).

Results

Nearly half of respondents (47.1%) agreed that "It seems like almost everything causes cancer," 27.0% agreed that

"There's not much people can do to lower their chances of getting cancer," and 71.5% agreed that "There are so many recommendations about preventing cancer, it's hard to know which ones to follow." These beliefs were stronger in subjects who were less educated but generally weaker among both African Americans and Hispanics relative to Whites. Fatalistic beliefs about cancer prevention were negatively associated with exercising weekly, not smoking, and eating five or more fruits and vegetables daily in multivariate analysis controlling for sociodemographic characteristics.

Conclusions

Americans who hold fatalistic beliefs about cancer prevention may be at greater risk of cancer because they are less likely to engage in various prevention behaviors. Results have notable implications for future cancer communication and education efforts.

SUMMARY:

This study examines the prevalence of fatalistic beliefs about cancer prevention in the overall US adult population, identifies sociodemographic correlates of these beliefs, and examines whether these beliefs are associated with the likelihood of engaging in three prevention behaviors. Consistent with previous research on associations between sociodemographics and cancer fatalism, fatalistic beliefs about cancer prevention are expected to be more prevalent among respondents with lower levels of education (Hypothesis 1) and among both Hispanics and African Americans and relative to Whites (Hypothesis 2). Based on the theoretical rationale described above, fatalistic beliefs about cancer prevention are expected to reduce the likelihood that individuals engage in prevention behaviors, including regular exercise, not smoking, and eating fruits and vegetables (Hypothesis 3).

Reaction

It is estimated that half of all men and one third of all women will develop some type of cancer in their lifetime, but several behaviors reduce cancer risk. Fruit and vegetable consumption reduces the risk of cancer, and lower weight, influenced by diet and exercise, is associated with lower risk of cancer onset and recurrence. Some scientists estimate that 30% of US cancer deaths are attributable to smoking, whereas 14% to 20% are attributable to overweight and obesity. Thus, a thorough understanding of the barriers to these behaviors is critical to efforts in cancer control.

Fatalism is usually common in American and African. They have a pessimistic attitude that cancer cannot be prevented and they believe that you will still die even though not with cancer so why submit yourself in screening tests. The study shows that this kind of behavior is more likely can acquire cancer.

As a student nurse it is necessary to emphasize to our clients the importance of having a healthy body. It is good thing that there are researches that could remind as to maintain or to have an attitude that could not lead us to acquiring such diseases. Being fatalistic is an undesirable trait. It is not recommended to encourage our clients. We should give health teaching that could prevent our client in getting cancer or any illnesses. Like for instance, they should have a healthy lifestyle. They should avoid smoking and drinking alcoholic beverages. Encourage them also to maintain a healthy diet. These would just serve as simple reminders not only for them but also with us. This is just simple yet it could save us from sacrificing in having fatal conditions.

BIBLIOGRAPHY

American Cancer Society. Cancer facts and figures 2005. Atlanta: American Cancer Society; 2004.

Brown JK, Byers T, Doyle C, et al. Nutrition and physical activity during and after cancer treatment: an

American Cancer Society guide for informed choices. *CA Cancer J Clin* 2003;**53**:268–91.

Rock CL, Demark-Wahnefried W. Nutrition and survival after the diagnosis of breast cancer: a review of the evidence. *J Clin Oncol* 2002;**20**:3302–16.

Institute of Medicine. Fulfilling the potential of cancer and prevention and early detection. Washington (DC): The National Academies Press; 2003.

Peto R, Lopez AD, Boreham J, et al. Mortality from smoking in developed countries, 1950–2000: indirect estimates from national vital statistics. New York (NY): Oxford University Press; 1994.

UNIVERSITY OF SAN AGUSTIN
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OLIVER, XIELDON VERANEE

Specialty Supplements and Breast Cancer Risk in the VITamins And Lifestyle (VITAL) Cohort

Theodore M. Brasky, *Johanna W. Lampe*, *John D. Potter*, *Ruth E. Patterson*, *Emily White*

Abstract

Background

Use of nonvitamin, nonmineral "specialty" supplements has increased substantially over recent decades. Several supplements may have anti-inflammatory or anticancer properties. Additionally, supplements taken for symptoms of menopause have been associated with reduced risk of breast cancer in two case-control studies. However, there have been no prospective studies of the association between the long-term use of these supplements and breast cancer risk.

Methods

Participants were female members of the VITamins And Lifestyle (VITAL) Cohort. Postmenopausal women, ages 50 to 76 years, who were residents of western Washington State, completed a 24-page baseline questionnaire in 2000 to 2002 (n = 35,016). Participants were queried on their recency (current versus past), frequency (days/week), and duration (years) of specialty supplement use. Incident invasive breast cancers (n = 880) from 2000 to 2007 were obtained from the Surveillance, Epidemiology, and End Results registry. Multivariable-adjusted hazards ratios (HR) and

95% confidence intervals (95% CI) were estimated by Cox proportional hazards models.

Results

Current use of fish oil was associated with reduced risk of breast cancer (HR, 0.68; 95% CI, 0.50-0.92). Ten-year average use was suggestive of reduced risk (*P* trend = 0.09). These results held for ductal but not lobular cancers. The remaining specialty supplements were not associated with breast cancer risk: Specifically, use of supplements sometimes taken for menopausal symptoms (black cohosh, dong quai, soy, or St. John's wort) was not associated with risk.

Conclusions

Fish oil may be inversely associated with breast cancer risk. Fish oil is a potential candidate for chemoprevention studies. Until that time, it is not recommended for individual use for breast cancer prevention.

SUMMARY:

Use of nonvitamin, nonmineral "specialty" supplements has increased substantially over recent decades. Several supplements may have anti-inflammatory or anticancer properties. One of the supplements is fish oil. Current use of fish oil was associated with reduced risk of breast cancer. The remaining specialty supplements were not associated with breast cancer risk: Specifically, use of supplements sometimes taken for menopausal symptoms (black cohosh, dong quai, soy, or St. John's wort) was not associated with risk.Fish oil is a potential candidate for chemoprevention studies. Until that time, it is not recommended for individual use for breast cancer prevention.

REACTION:

Breast cancer (malignant breast neoplasm) is cancers originating from breast tissue, most commonly from the inner lining of milk ducts or the lobules that supply the ducts with milk. Worldwide, breast cancer comprises 10.4% of all cancer incidence among women, making it the most common type of non-skin cancer in women and the fifth most common cause of cancer death. On the other hand, Fish oil, made from the tissue of oily fish—such as salmon, tuna, mackerel, herring, lake trout and sardines—has many health benefits. Fish oil contains important Omega-3 fatty acids , most notably eicosapentaenoic acid (EPA) and decosahexaenoic acid (DHA).

On the research, it has found out that using fish oil is inversely associated to breast cancer risk. I think it

should be further studied to whether it would greatly affect breast cancer.. The use of fish oil should not stop only for cardiac enhancement but to its effectiveness or risks to other diseases. People should use this cautiously because too much of it is bad for our health. They should consult the physician before taking it.

BIBLIOGRAPHY:

Braskey, Theodore M. et.al, Specialty Supplements and Breast Cancer Risk in the VITamins And Lifestyle (VITAL) Cohort, J**uly 19, 2010**

http://cebp.aacrjournals.org/content/19/7/1696.abstract

UNIVERSITY OF SAN AGUSTIN
COLLEGE OF NURSING

PAGTOL-AN, MA. THERESA

Breast implants following mastectomy in women with early-stage breast cancer: prevalence and impact on survival

*Gem M Le, Cynthia D O'Malley, Sally L Glaser, Charles F Lynch, Janet L Stanford, Theresa HM Keegan, **and** Dee W West*

Abstract

Background

Few studies have examined the effect of breast implants after mastectomy on long-term survival in breast cancer patients, despite growing public health concern over potential long-term adverse health effects.

Methods

We analyzed data from the Surveillance, Epidemiology and End Results Breast Implant Surveillance Study conducted in San Francisco–Oakland, in Seattle–Puget Sound, and in Iowa. This population-based, retrospective cohort included women younger than 65 years when diagnosed with early or unstaged first primary breast cancer between 1983 and 1989, treated with mastectomy. The women were followed for a median of 12.4 years (n = 4968). Breast implant usage was validated by medical record review. Cox proportional hazards models were used to estimate hazard rate ratios for survival time until death due to breast cancer or other causes for women with and without breast implants, adjusted for relevant patient and tumor characteristics.

Results

Twenty percent of cases received postmastectomy breast implants, with silicone gel-filled implants comprising the most common type. Patients with implants were younger and more likely to have *in situ* disease than patients not receiving implants. Risks of breast cancer mortality (hazard ratio, 0.54; 95% confidence interval, 0.43–0.67) and nonbreast cancer mortality (hazard ratio, 0.59; 95% confidence interval, 0.41–0.85) were lower in patients with implants than in those patients without implants, following adjustment for age and year of diagnosis, race/ethnicity, stage, tumor grade, histology, and radiation therapy. Implant type did not appear to influence long-term survival.

Conclusions

In a large, population-representative sample, breast implants following mastectomy do not appear to confer any survival disadvantage following early-stage breast cancer in women younger than 65 years old.

SUMMARY:

In this large population-based study of breast cancer patients treated with mastectomy, risks of breast cancer death and nonbreast cancer mortality were lower in women with implants than in women without implants, after adjustment for potential confounders. Postmastectomy breast implants were used by one-fifth of patients who were slightly younger at diagnosis and were more likely to be of white race/ethnicity and to have *in situ* disease than women without implants. The silicone gel-filled implant was the most common type of implant received.

Thus, despite an overall decrease in implant use among breast cancer patients, breast implants remain an important and commonly used option for women considering reconstruction. Certainly, further research is needed to explain the survival differential in women with breast implants and those without, by examining potentially explanatory factors such as SES, comorbidity, smoking, or other lifestyle factors. However, based on this large, representative sample of breast cancer patients with extensive follow-up, we found that breast implants following mastectomy do not appear to confer any survival disadvantage following early-stage breast cancer in women younger than 65 years old.

REACTION:

There were a lot of reported comorbidity rate of cancer patients every year all over the country,. One most common type of cancer that includes women’s death is the breast cancer. As we can hear the word cancer, there will come in

to the minds of every person that this is a life-threatening disease condition,; it could metastasize and will possibly produce a lot of complications. Yes, it will and this should be treated as early s possible during on its acute phase.

This research study that was done by Georgiade and colleagues, and Vandeweyer and colleagues will contribute a big help to the society concerned about breast cancer. We all know that there are a lot of remedies, new technologies to detect breast cancer as early as possible. One of this is is the mammography--- a procedure used to detect abnormal masses and lumps of the breast. But the question is, after detection of this and mastectomy was done, what will the woman feel that her breast was already asymmetrical or worst, she don't have any breasts at all? As a woman, there will come a point that a woman will undergo depression and insecurities due to a loss of a body part. This will impair her body image.

The main point of this study is that the risk of death versus survival for patients having breast implants following mastectomy. The research have shown that ½ of the population have survived death for those who have undergone breast implants than those who haven't.

As a student nurse, this study implies a big help for me. As a woman, one of my major concern is about my health, especially that I'm on a pressured field. I should take good care of myself and the environment that I'm dealing. Because these may be one of the factors that will trigger the signs and symptoms of breast cancer. This also implies that eventhough that this study has shown a decrease rate

of comorbidity for patients with breast implants, there is still a need to have monthly regular check-ups to monitor the said condition. Giving health teachings like having lifestyle modifications like quitting vices (smoking and alcohol intake) will reduce the risk of having cancer of all types. In short, prevention is better than cure. For patients who have this condition, as a nurse, one of my responsibility is to be an advocator and an adviser. Patients who undergone this stage of life is in need for understanding and acceptance.

REFERENCE:

http://breast-cancer-research.com/content/7/2/R184#IDAO2HJJ

UNIVERSITY OF SAN AGUSTIN
COLLEGE OF NURSING

PANIZAL, MARICAR

Fruit and Vegetable Intake and Overall CancerRisk in the European Prospective InvestigationInto Cancer and Nutrition (EPIC)

Abstract

Background

It is widely believed that **cancer** can be prevented by high intake of fruits and vegetables. However, inc**on**sistent results from many studies have not been able to c**on**clusively establish an inverse associati**on** between fruit and vegetable intake and overall **cancer** risk.

Methods

We c**on**ducted a prospective analysis of the European Prospective Investigati**on** into **Cancer** and Nutriti**on** (EPIC) cohort to assess relati**on**ships between intake of total fruits, total vegetables, and total fruits and vegetables combined and **cancer** risk during 1992–2000. Detailed informati**on on** the dietary habit and lifestyle variables of the cohort was obtained. **Cancer** incidence and mortality data were ascertained, and hazard ratios (HRs) and 95% c**on**fidence intervals (CIs) were estimated using multivariable Cox regressi**on** models. Analyses were also c**on**ducted for **cancer**s associated with tobacco and alcohol after stratificati**on** for tobacco smoking and alcohol drinking.

Results

Of the initial 142 605 men and 335 873 women included in the study, 9604 men and 21 000 women were identified with **cancer** after a median follow-up of 8.7 years. The crude **cancer** incidence rates were 7.9 per 1000 pers**on**-years in men and 7.1 per 1000 pers**on**-years in women. Associati**on**s between reduced **cancer** risk and increased intake of total fruits and vegetables combined and total vegetables for the entire cohort were similar (200 g/d increased intake of fruits and vegetables combined, HR = 0.97, 95% CI = 0.96 to 0.99; 100 g/d increased intake of totalvegetables, HR = 0.98, 95% CI = 0.97 to 0.99); intake of fruits showed a weaker inverse associati**on** (100 g/d increased intake of total fruits, HR = 0.99, 95% CI = 0.98 to 1.00). The reduced risk of **cancer** associated with high vegetable intake was restricted to women (HR = 0.98, 95% CI = 0.97 to 0.99). Stratificati**on** by alcohol intake suggested a str**on**ger reducti**on** in risk in heavy drinkers and was c**on**fined to **cancer**s caused by smoking and alcohol.

Conclusions

A very small inverse associati**on** between intake of total fruits and vegetables and **cancer** risk was observed in this study. Given the small magnitude of the observed associati**on**s, cauti**on** should be applied in their interpretati**on**.

SUMMARY:

We often believed that intake of fruits and vegetables can be used to prevent and others even to cure certain cancers. But this lack researches and inconsistent study results. This study was conducted to prove the relationship between the intake of fruits and vegetable and the risk of acquiring cancer.

As the study concluded: The associati**on** between high intake of fruits and vegetables and reducti**on** in overall **cancer** risk is not c**on**clusively established.

REACTION:

Many television commercials nowadays shows that there are fruits that not only prevent but cure certain cancers and other diseases. This has gained sales and many people are convinced for its potency and cure prowess.

People should be cautioned about its efficiency and therapeutic effects for it may put their life on great danger and it may even aggravate the diseases that they are suffering.

BIBLIOGRAPHY

Boffetta, Paolo M. "Fruit and Vegetable Intake and Overall Cancer Risk in the European Prospective Investigation Into Cancer and Nutrition (EPIC) -- Boffetta Et Al. 102 (8): 529 -- JNCI Journal of the National Cancer Institute." *Oxford Journals | Medicine | JNCI J Natl Cancer Inst*. 6 Apr. 2010. Web. 15 Aug. 2010. <http://jnci.oxfordjournals.org/cgi/content/abstract/djq072>.

PLACIO, DORELEE

Tea drinking habits and esophageal cancer in a high risk area in northern Iran: population based case-control study

Farhad Islami and Akram Pourshams

Objective

To investigate the association between tea drinking habits in Golestan province, northern Iran, and risk of esophageal squamous cell carcinoma.

Design

Po

pulation based case-control study. In addition, patterns of tea drinking and temperature at which tea was drunk were measured among healthy participants in a cohort study.

Setting

Golestan province, northern Iran, an area with a high incidence of esophageal squamous cell carcinoma.

Participants

30

0 histologically proved cases of esophageal squamous cell carcinoma and 571 matched neighborhood controls in the case-control study and 48 582 participants in the cohort study.

Main outcome measure

Odds ratio of esophageal squamous cell carcinoma associated with drinking hot tea.

Results

Nearly all (98%) of the cohort participants drank black tea regularly, with a mean volume consumed of over one liter a day. 39.0% of participants drank their tea at temperatures less than 60°C, 38.9% at 60-64°C, and 22.0% at 65°C or higher. A moderate agreement was found between reported tea drinking temperature and actual temperature measurements (weighted 0.49). The results of the case-control study showed that compared with drinking lukewarm or warm tea, drinking hot tea (odds ratio 2.07, 95% confidence interval 1.28 to 3.35) or very hot tea (8.16, 3.93 to 16.9) was associated with an increased risk of esophageal cancer. Likewise, compared with drinking tea four or more minutes after being poured, drinking tea 2-3 minutes after pouring (2.49, 1.62 to 3.83) or less than two minutes after pouring (5.41, 2.63 to 11.1) was associated with a significantly increased risk. A strong agreement was found between responses to the questions on temperature at which tea was drunk and interval from tea being poured to being drunk (weighted 0.68).

Conclusion

Drinking hot tea, a habit common in Golestan province, was strongly associated with a higher risk of esophageal cancer.

Summary

The research done to know the association between tea drinking habits in Golestan province, northern Iran and risk of esophageal squamous cell carcinoma. They measured the patterns of tea drinking and temperature at which tea was drunk among healthy participants.

As a result, compared with drinking lukewarm or warm tea, drinking hot tea or very hot tea was associated with an increased risk of esophageal cancer. Drinking tea 2-3 minutes after pouring or less than two minutes after pouring was associated with a significantly increased risk compared with drinking tea four or more minutes after being poured.

Drinking hot tea, a habit common in Golestan province, was strongly associated with a higher risk of esophageal cancer.

Reaction

Drinking tea is a healthy way of living. Most Asians drink tea as a tradition and also with its therapeutic effects to the body. Benefits such as it is used to treat multiple sclerosis, stop Alzheimer’s and Parkinson’s disease, raise the metabolism and increase fat oxidation, reduces the risk of heart diseases and heart attacks by reducing the risk of thrombosis, treat rheumatoid arthritis and cardiovascular diseases and treat impaired immune function. Even some researches show that, drinking green tea regularly may help prevent tooth decay by killing the bacteria which causes the dental plaque.

Based on the research, drinking hot tea by people living in Golestan province in Iran was strongly associated with higher risk of esophageal cancer. No known reason why it could increase the risk of having esophageal cancer but for me may be because of the irritation given by the tea including its temperature. Our throat and esophagus have sensitive muscles and tissues that could lead to the said disease. Too much is bad and moderation is really a must. I do believe that not all things could give only benefits but they have also its disadvantages. The sediments and chemical contents of the tea could also be factors in developing the disease.

In general, let us all remember that we must be conscious and aware of our health. Let us take good care of it because it is one of our precious wealth.

Bibliography

Islami, Farhad and Poursham, Akram. Tea drinking habits and esophageal cancer in a high risk area in northern Iran: population based case-control study. 26 March 2009, 338-929.

UNIVERSITY OF SAN AGUSTIN
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SALVILLA, DOMARIE JAY

Characteristics of cancer patients using homeopathy compared with those in conventional care: a cross-sectional study

C. Guethlin1, H. Walach

July 28, 2010.

Abstract

Background

There are only few studies on cancer patients who are treated in complementary and alternative medicine clinics and comparing them with patients in conventional care. We will present the comparison of characteristics of two patient cohorts: one was treated in a homeopathic cancer care clinic and one was treated in a conventional oncology care (CC) outpatient clinic.

Patients and methods

Six-hundred and forty-seven patients were included in this cross-sectional cohort study and had to fill in questionnaires [health-related quality of life (QoL) (Functional Assessment of Cancer Therapy—General Scale), depression and anxiety (Hospital Anxiety and Depression Scale), fatigue (Multidimensional FatigueInventory) and expectancies toward treatment]. Clinical data were extracted from medical records. This study presents the comparison of both cohorts.

Results

Patients in the homeopathy cohort are younger, better educated and more often employed than patients in the CC cohort. The most pronounced differences indicate longer disease histories and different diagnostic and clinical pretreatment variables. Despite the clinical differences, QoL as well as anxiety, depression and fatigue was similar in both the groups.

Conclusions

Homeopathic treatment is sought by cancer patients at a different phase during the course of the disease, which has particular implications for research. However, expectancies toward the benefit of the treatment as well as QoL data are similar.

SUMMARY:

This study is about the comparison of patients treated via homeopathy vs. conventional care in terms of their characteristics. It shows in this study that patients in homeopathy are younger, better educated and employed compared to those in conventional care. In homeopathy heath care professionals properly select the remedies that assist the body wisdom of an individual in focusing on the root cause of the disease pattern. The best feature of this study is that it helps in the treatment of cancer patients by also alleviating their emotional burdens because professional homeopath does not only provide remedies also assessing individual to express their feelings.

Professional homeopaths believe that psychotherapy could also enhance the effectiveness of the remedies they given to the patients. It does not only focus on the healing of the disease itself but also to the renewal of a person as a whole being.

REACTION:

Homeopathy is a sub-system of natural health care in which extreme dilutions of substances from nature are used to stimulate a healing response. The role of a professional homeopath is to understand the symptom pictures of a large number of remedies, and then to be able to select the remedy that most closely matches the symptom picture of the patient which they called similimum. When this match is achieved – that is, the symptom picture of the remedy matches the symptom picture of the individual suffering from a disease pattern – the individual's innate healing ability is activated and healing occurs.

As a student nurse, knowing this kind of treatment for cancer patients gives me information that cancer could still be suppressed. Also, it helps to lessen the mortality rate of those patients suffering from different types of cancer. As a nurse it is our greatest task to always choose the best treatment for our patients and ensure that they are receiving quality health care.

Even though there are lots of studies supporting the effectiveness of this therapy still there is a need to consider another approach like nutrition, immune system

support, diet and detoxification program. Sad to say that here in the Philippines it is not yet available.

SOURCE:

Guethlin, C.,Walach, H.,"Annals of Oncology",Oxford Journals,&nb sp; http://annonc.oxfordjournals.org/content/21/5/1094.abstract

SISION, CHARMAINE

Cancer risk in persons with HIV/AIDS in India: a review and future directions for research

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Abstract

Background

India has a large and evolving HIV epidemic. Little is known about cancer risk in Indian persons with HIV/AIDS (PHA) but risk is thought to be low.

Methods

To describe the state of knowledge about cancer patterns in Indian PHA, we reviewed reports from the international and Indian literature.

Results

As elsewhere, non-Hodgkin lymphomas dominate the profile of recognized cancers, with immunoblastic/large cell diffuse lymphoma being the most common type. Hodgkin lymphoma is proportionally increased, perhaps because survival with AIDS is truncated by fatal infections. In contrast, Kaposi sarcoma is rare, in association with an apparently low prevalence of Kaposi sarcoma-associated herpesvirus. If confirmed, the reasons for the low prevalence need to be

understood. Cervical, anal, vulva/vaginal and penile cancers all appear to be increased in PHA, based on limited data. The association may be confounded by sexual behaviors that transmit both HIV and human papillomavirus. Head and neck tumor incidence may also be increased, an important concern since these tumors are among the most common in India. Based on limited evidence, the increase is at buccal/palatal sites, which are associated with tobacco and betel nut chewing rather than human papillomavirus.

Conclusion

With improving care of HIV and better management of infections, especially tuberculosis, the longer survival of PHA in India will likely increase the importance of cancer as a clinical problem in India. With the population's geographic and social diversity, India presents unique research opportunities that can be embedded in programs targeting HIV/AIDS and other public health priorities.

SUMMARY:

Cancer is a health concern in the general population of India, where approximately 750,000 cancers are diagnosed annually. The current review of the data available about cancer in PHA in India highlights the paucity of information in these high-risk persons. The studies are limited in number and duration and have few outcomes. The published studies include almost no assessment of risk

factors which might affect cancer risks in PHA. In the general population of India, the patterns of diagnosed cancer differ from those in the developed countries, indicating risk factors for cancer in India differ from those in developed countries.

In India, KS is uncommon. KSHV infection is required for KS to develop, and population variations in KS incidence seem to reflect differences in the prevalence of KSHV. Human papillomavirus is associated with a variety of anogenital cancers and appears to be an important contributor to cancer risk in India. Cervical cancer incidence is among the highest in the world, and vulva/vaginal, anal and penile cancers all have a relatively high incidence. Their risk appears to be even higher in India PHAs. As Indian PHA survive longer, these cancers could become increasingly important, making screening PHA for pre-cancerous lesions a high public health priority.

Notably, the increases were mainly at buccal/palatal sites which are specifically associated with chewing tobacco and betel nut rather than at pharyngeal and tonsillar sites, which are HPV-associated. In India, tobacco and betel chewing are widely practiced, albeit less frequently in recent years.The recent finding of a polyomavirus associated with Merkel cell carcinoma, an HIV/AIDS related tumor, demonstrates the potential for discovering new viral associations.

REACTION:

While the studies suggest that cancer is not currently a common clinical problem, it is reasonable to speculate that competing mortality from infectious problems, particularly

tuberculosis and fungal infections, has truncated survival, preventing progression to severe immunosuppression when risks for common cancers like NHL and KS increase. However, India is emerging as a leader in developing affordable regimens of highly active antiretroviral therapy to control HIV replication and drugs to treat infectious conditions. The application of these treatments will reduce the effects of competing mortality and likely amplify the importance of cancer in PHA.

As a student nurse, it is important that prevention of HIV infection must be the highest public health priority in India. Reducing mortality from preventable infections like tuberculosis and Candida is the primary priority. In this context, systematic gathering of treatment outcome data for cancers in PHA and comparing response and survival to cancers in non-HIV infected population is essential. Such data will allow the development of treatment regimens that might best be suited to PHA in India and permit the investments in antiretroviral therapy to be meaningful to all PHA. Research can provide practical as well as academic benefits, informing both health care and the public health planning. These studies also encourage the development of epidemiology and laboratory capability. Indian researchers should focus on the advantages conferred by undertaking studies that might be uniquely done in their own context and are likely to have public health relevance to India.

BIBLIOGRAPHY:

http://www.infectagentscancer.com/content/4/1/4

SULAPAS, LESLY JEANNE

Oral cancer screening in the Bangladeshi community of Tower Hamlets: a social model

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ABSTRACT

Background

UK oral cancer incidence has risen by 22% in the last 10 years. Oral cancer is often detected at a late stage when treatment is debilitating and the chances of survival are poor. Certain black and minority ethnic groups are at elevated risk of oral cancer due to the prevalence of risk factor behaviours. We describe the background to, the development of and outcomes of an oral cancer screening activity appropriate to the needs of members of a disadvantaged community at high risk of oral cancer, carried out between 2006 and 2008 in Tower Hamlets, East London.

Methods

In all, 1320 people participated during 34 days of screening, divided into two phases (Phase I (2006/2007):

n=485, Phase II (2008): *n*=835). Modifications to the delivery process were implemented for Phase II in an attempt to recruit more high-risk individuals and to improve screening specificity.

Results

In total, 75 people were urgently referred for further investigation (Phase I: *n*=20, Phase II: *n*= 55). Nine were diagnosed with dysplastic lesions (Phase I: *n*=3, Phase II: *n*=6) and a further eight showed potentially malignant disorders without dysplasia (Phase I: *n*=1, Phase II: *n*=7). Screening participants with low levels of completed education (OR: 6.94, 95% CI: 1.66, 28.98) and who chewed paan with tobacco (OR: 8.01, 95% CI: 3.54, 18.08) were more likely to be referred for further investigation.

Conclusion

The project offers insights for the further development of oral cancer screening interventions for disadvantaged communities.

Summary

Oral cancer is defined as cancers of the lip, tongue, oral cavity, oropharynx, hypopharynx and piriform sinus. The majority of tumours are squamous cell carcinomas, with the most common sites being the oral cavity (31%) and the tongue (29%). The least common site for oral cancer is the lip, accounting for only 6% of cases.The Bangladeshi community exhibits a high prevalence of a number of oral cancer risk factors, including smoking, chewing tobacco and chewing areca nut but excluding alcohol consumption when

compared with the general adult population.Between 2006 and 2008, a total of 34 screening sessions were undertaken in Tower Hamlets with 1320 individuals screened (485 iPhase I and 835 in Phase II). On average, 39 people were screened per session (range 19–82). Each session was ~7 h in duration, undertaken between 0930 and 1630 with flexible break times dependent on the flow of patients.The project offers insights for the further development of oral cancer screening interventions for disadvantaged communities.

Reaction

This project has shown the feasibility of conducting oral cancer screening in a deprived borough in East London, using a mobile dental clinic with dental practitioners undertaking the screening, supported by ethnically matched advocates from the local community. In line with the aims of the project, over 90% of the screening attendees in Phase II were from the local Bangladeshi community. This project also confirms the importance of providing oral health services in community settings .

This project has shown the feasibility and acceptability of oral cancer screening using a mobile dental unit among the Bangladeshi community of Tower Hamlets. It would now be valuable to test this approach in other high-risk communities.

Further investigation into the reasons for non-compliance with referral to secondary care is needed. Innovative use of the mobile dental unit could eradicate delay in obtaining a definitive diagnosis from initial screening if suspicious lesions were biopsied in the field. A brush

biopsy and immediate cytological analysis could be an appropriately quick and minimally invasive procedure to undertake on the mobile dental unit.

Bibliography:

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2790708/

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Smoking Cessation: An Integral Part of Lung Cancer Treatment

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Abstract

Background

Lung cancer is the leading cause of cancer death in the US. About 50% of lung cancer patients are current smokers at the time of diagnosis and up to 83% continue to smoke after diagnosis. A recent study suggests that people who continue to smoke after a diagnosis of early-stage lung cancer almost double their risk of dying. Despite a growing body of evidence that continued smoking by patients after a lung cancer diagnosis is linked with less effective treatment and a poorer prognosis, the belief prevails that treating tobacco dependence is useless. With improved cancer treatments and survival rates, smoking cessation among lung cancer patients has become increasingly important. There is a pressing need to clarify the role of smoking cessation in the care of lung cancer patients.

Objective

This paper will report on the benefits of smoking cessation for lung cancer patients and the elements of smoking cessation treatment, with consideration of tailoring to the needs of lung cancer patients.

Results

Given the significant benefits of smoking cessation and that tobacco dependence remains a challenge for many lung cancer patients, cancer care providers need to offer full support and intensive treatment with a smoking cessation program that is tailored to lung cancer patients' specific needs.

Conclusion

A tobacco dependence treatment plan for lung cancer patients is provided.

SUMMARY:

Most smokers develop lung cancer. However, despite having the illness, these smokers still continue to smoke. The research states that smoking cessation among lung cancer patients has become increasingly important.

This research aims to report on the benefits of smoking cessation for lung cancer patients and the elements of smoking cessation treatment, with consideration of tailoring to the needs of lung cancer patients. The results showed that lung cancer patients should be provided or offered full support and intensive treatment with a smoking cessation program that is tailored to lung cancer patients' specific needs.

REACTION:

Cancer is the illness or condition caused by the presence of a malignant tumor. It is characterized by excessive, uncontrolled growth of abnormal cells, which invade and destroy other tissues. Lung cancer is the malignancy of the lungs wherein in about 90 percent of all lung cancer occurs in current or former smokers.

Smoking is a hard habit to break because tobacco contains nicotine, which is highly addictive. It causes cancer, emphysema, and heart disease. It can also shorten life by 10 years or more; and the habit can cost a smoker thousands of dollars a year.

This research showed that smoking cessation could really help save lives of people even if they have already developed lung cancer. If lung cancer is diagnosed early, the patients who smoke could be provided a smoking

cessation program to prevent further complications of the illness. And, with the other treatments provided, the patient could survive.

In the nursing profession, this research is of great help especially in preparation of the care plan for lung cancer patients. It is also useful in making the care plan of other patients who smoke.

Knowing that smoking is addictive and can lead to the development of a lot of diseases, we must no smoke in any way. As nurses, we should be an example or models to our patients. So, we should also stop smoking and encourage our colleagues to avoid smoking as well.

As student nurses, we should encourage our clients to stop smoking. We may also educate them of the effects of smoking. We may also inform them of the contents of cigarettes which could greatly affect their health. We should also advise the non-smokers to avoid second-hand smoking because the smoke exhaled by the smokers could also affect them.

I suggest that the smoking cessation program specially prepared for the lung cancer patients will be implemented. In this way, we can save lives.

I also suggest that health education should be done regarding smoking and its effects not only to adults but teenagers, as well. Other research studies showed that smoking cigarettes starts before 18 years of age. I also suggest that proper information dissemination must be done from the educators, to the parents and to the children as well. Since prevention is better than cure, awareness, health promotion and disease prevention could have a great

impact to the people. In this way, we prevent the occurrence of illnesses and promote wellness.

BIBLIOGRAPHY:

Cataldo JK, et al. 'Smoking Cessation: An Integral Part of Lung Cancer Treatment' 2010 [Online]

Available < http://www.ncbi.nlm.nih.gov/pubmed/20699622> (August 15, 2010)

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Elevated risk of chronic lymphocytic leukemia and other indolent non-Hodgkin's lymphomas among relatives of patients with chronic lymphocytic leukemia

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Background

Previous studies have shown increased familial risk for chronic lymphocytic leukemia. In the most comprehensive study to date, we evaluated risk of chronic lymphocytic leukemia and lymphoproliferative disorders among first-degree relatives of chronic lymphocytic leukemia cases compared to first-degree relatives of controls.

Design and Methods

Population-based registry data from Sweden were used to evaluate outcomes in 26,947 first-degree relatives of 9,717 chronic lymphocytic leukemia patients (diagnosed 1958–2004) compared with 107,223 first-degree relatives of 38,159 matched controls. Using a marginal survival model, we calculated relative risks (RR) and 95% confidence intervals as measures of familial aggregation.

Results

Compared to relatives of controls, relatives of chronic lymphocytic leukemia patients had an increased risk for chronic lymphocytic leukemia (RR=8.5, 6.1–11.7) and other non-Hodgkin's lymphomas (NHLs) (RR=1.9, 1.5–2.3). Evaluating NHL subtypes, we found a striking excess of indolent B-cell NHL, specifically lymphoplasmacytic lymphoma/Waldenström macroglobulinemia and hairy cell leukemia. No excesses of aggressive B-cell or T-cell lymphomas were found. There was no statistical excess of Hodgkin's lymphoma, multiple myeloma, or the precursor condition, monoclonal gammopathy of undetermined significance, among chronic lymphocytic leukemia relatives.

Conclusions

These familial aggregations are striking and provide novel clues to research designed to uncover early pathogenetic mechanisms in chronic lymphocytic leukemia including studies to identify germ line susceptibility genes. However, clinicians should counsel their chronic lymphocytic leukemia patients emphasizing that because the baseline population risks are low, the absolute risk for a first-degree relative to develop chronic lymphocytic leukemia or another indolent lymphoma is low. At this time, an increased medical surveillance of first-degree relatives of chronic lymphocytic leukemia patients has no role outside research studies.

SUMMARY:

Chronic lymphocytic leukemia (CLL) is a malignancy characterized by the accumulation of small, mature-appearing lymphocytes in the bone marrow, blood, and lymphoid tissues. It is estimated that in 2008, CLL will account for 34% of all leukemias in the United States. Known risk factors for disease are male gender, advanced age, white ancestry, and family history of hematologic malignancy.

In addition, researchers also evaluated risk of chronic lymphocytic leukemia and lymphoproliferative disorders among first-degree relatives of chronic lymphocytic leukemia cases compared to first-degree relatives of controls.

Using population-based data from Scandinavia, the researchers previously showed that CLL, non-Hodgkin's lymphoma (NHL) and Hodgkin's lymphoma (HL) aggregated in families. The risk for CLL was significantly elevated (7.5 fold) in relatives of CLL patients compared to relatives of controls consistent with the high risk seen in the Utah population. They recently assembled a population-based cohort of lymphoplasmacytic lymphoma (LPL) and Waldenström macroglobulinemia (WM) patients in Sweden. Among relatives of these patients, they found an increased risk for CLL in addition to other LPL/WM and other lymphoma subtypes compared to relatives of controls.

Results showed that there are no excesses of aggressive B-cell or T-cell lymphomas were found. There was no

statistical excess of Hodgkin's lymphoma, multiple myeloma, or the precursor condition, monoclonal gammopathy of undetermined significance, among chronic lymphocytic leukemia relatives.

REACTION:

Having knowledge on leukemia, there are certain conditions we should consider with like we should watch out for bleeding, pallor, etc. Through this, health teachings are of great help to them and to their family members.

In addition, the researchers found elevated risk of CLL and related indolent NHLs among first-degree relatives of CLL patients, which supports a role for germ line susceptibility genes, possibly interacting with environmental factors. Clinicians need to keep in mind the low baseline risk of CLL in the general population. When counseling CLL patients about practical implications of the observed 8.5-fold excess relative risks of CLL and the increased risk of related indolent lymphomas among relatives to CLL patients, it must be stressed that the absolute risk for a first-degree relative to develop CLL or another indolent lymphoma is still very low. Based on current clinical knowledge, at this time, an increased medical surveillance of first-degree relatives of CLL patients has no role outside research studies.

SOURCE:

http://www.haematologica.org/cgi/content/abstract/94/5/647

BIBLIOGRAPHY:

Björkholm, Magnus, et.al., "Elevated risk of chronic lymphocytic leukemia and other indolent non-Hodgkin's lymphomas among relatives of patients with chronic lymphocytic leukemia", Hematologica, Vol 94, Issue 5, 647-653 doi:10.3324/haematol.2008.003632

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Efficacy of human papillomavirus-based screen-and-treat for cervical cancer prevention among HIV-infected women

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Abstract

BACKGROUND

Cervical cancer prevention should be provided as part of primary healthcare services for HIV-infected women but conventional screening programs are difficult to implement in low-resource settings. Here, we evaluate the efficacy among HIV-infected women of a simpler, screen-and-treat strategy in which all women with a positive screening test are treated with cryotherapy.

METHODS

We conducted a randomized clinical trial of two screen-and-treat strategies among 6555 women in Cape Town, South Africa, among whom 956 were HIV-positive. Women were randomized to screen-and-treat utilizing either human papillomavirus DNA testing or visual inspection with acetic

acid as the screening method or to a control group. Women were followed for up to 36 months after randomization with colposcopy and biopsy to determine the study endpoint of cervical intraepithelial neoplasia grade 2 or higher.

RESULTS

In the control group, HIV-positive women had higher rates of cervical intraepithelial neoplasia grade 2 or higher detected by 36 months (14.9%) than HIV-negative women (4.6%) (P = 0.0006). Screen-and-treat utilizing human papillomavirus DNA testing significantly reduced cervical intraepithelial neoplasia grade 2 or higher through 36 months in both HIV-positive (relative risk = 0.20, 95% confidence interval 0.06-0.69) and HIV-negative women (relative risk = 0.31, 95% confidence interval 0.20-0.50). Reductions in the visual inspection with acetic acid-and-treat group were less marked. Complications of cryotherapy were mostly minor and did not differ in frequency between HIV-positive and HIV-negative women.

CONCLUSION

Screen-and-treat using human papillomavirus testing is a simple and effective method to reduce high-grade cervical cancer precursors in HIV-infected women.

SUMMARY:

The research study aims to evaluate the efficacy of HPV-based screen-and-treat strategy among HIV-infected women for prevention of cervical cancer. The participants of the study include women who were HIV-positive and HIV-negative. These women were randomized to screen-and-treat using either human papillomavirus DNA testing or visual inspection with acetic acid as the screening method or to a control group. Then, these women were followed for up to 36 months after randomization with colposcopy and biopsy to determine the study endpoint of cervical intraepithelial neoplasia grade 2 or higher. The results showed that HIV-positive had higher rates of cervical intraepithelial neoplasia garde 2 or higher than HIV-negative women. And, screen-and-treat utilizing HPV DNA testing significantly reduced cervical intraepithelial neoplasia grade 2 or higher through 36 months in both HIV-positive and HIV-negative women. The authors concluded that screen-and-treat using human papillomavirus testing is an effective method to reduce high-grade cervical cancer precursors in HIV-infected women.

REACTION:

Cervical cancer awareness is rampant nowadays. People, especially the women are made more aware of the illness and prevention methods.

This research abstract brought about new information regarding cervical cancer prevention specifically screen-and-test method to prevent high grade cervical cancer among HIV-positive women.

In taking care of patients who are HIV-positive, we must always protect them from developing complications since they could be immuno-compromised. In turn, they are more likely to acquire other diseases. With this research, the development of cervical intraepithelial neoplasia is prevented.

Awareness and prevention is better than cure. As student nurses, we could educate the people; promote awareness and prevention of cervical cancer. We could inform them of the disease process and ways to prevent its occurrence. We could also share to the cardinal signs of cancer and encourage them to seek immediate medical help if the experience such signs for early detection and early treatment as well.

This abstract ale helped us understand more about the possible diagnostic tests to be done to patients who are HIV-positive and those who are at high risk of cervical cancer.

It is recommended that health education must be done to promote awareness and screenings must also be made aware. Possible cost-effective screenings may also be provided by the government so that people, especially the women, may not acquire such illness. In return, the women, especially those at child-bearing age, are protected and our future could be preserved. People should also be made aware of the other screening tests that they could avail so that they may have their choice on how to prevent the occurrence of such disease. After all, prevention is better than cure.

BIBLIOGRPAHY:

Kuhn L., et al. 'Efficacy of human papillomavirus-based screen-and-treat for cervical cancer prevention among HIV-infected women' 2010 [Online] available <http://www.ncbi.nlm.nih.gov/pubmed/20706107> (August 15, 2010)

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Prospective study of physical activity and risk of postmenopausal breast cancer

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Abstract

Introduction

To prospectively examine the relation of total, vigorous and non-vigorous physical activity to postmenopausal breast cancer risk.

Methods

We studied 32,269 women enrolled in the Breast Cancer Detection Demonstration Project Follow-up Study. Usual physical activity (including household, occupational and leisure activities) throughout the previous year was assessed at baseline using a self-administered questionnaire. Postmenopausal breast cancer cases were identified through self-reports death certificates and linkage to state cancer registries. A Cox proportional hazards regression was used to estimate the relative risk and 95% confidence intervals of postmenopausal breast cancer associated with physical activity.

Results

During 269,792 person-years of follow-up from 1987 to 1998, 1506 new incident cases of postmenopausal breast cancer were ascertained. After adjusting for potential risk factors of breast cancer, a weak inverse association between total physical activity and postmenopausal breast cancer was suggested (relative risk comparing extreme quintiles = 0.87; 95% confidence interval = 0.74 to 1.02; p for trend = 0.21). That relation was almost entirely contributed by vigorous activity (relative risk comparing extreme categories = 0.87; 95% confidence interval = 0.74 to 1.02; p for trend = 0.08). The inverse association with vigorous activity was limited to women who were lean (ie, body mass index <25.0 kg/m^2: relative risk = 0.68; 95% confidence interval = 0.54 to 0.85). In contrast, no association with vigorous activity was noted among women who were overweight or obese (ie, body mass index ≥ 25.0 kg/m^2: relative risk = 1.18; 95% confidence interval = 0.93 to 1.49; p for interaction = 0.008). Non-vigorous activity showed no relation to breast cancer (relative risk comparing extreme quintiles = 1.02; 95% confidence interval = 0.87 to 1.19; p for trend = 0.86). The physical activity and breast cancer relation was not specific to a certain hormone receptor subtype.

Conclusions

In this cohort of postmenopausal women, breast cancer risk reduction appeared to be limited to vigorous forms of activity; it was apparent among normal weight women but not overweight women, and the relation did not vary by hormone receptor status. Our findings suggest that physical

activity acts through underlying biological mechanisms that are independent of body weight control.

SUMMARY:

We found that a higher amount of vigorous physical activity was associated with a small, statistically non-significant decrease in postmenopausal breast cancer risk in our cohort as a whole. However, when we evaluated the relation of vigorous activity to breast cancer among women who were of normal weight, the association became markedly stronger, with risk among women reporting the highest amount of vigorous activity decreasing by about 30% compared with women with no vigorous activity. In contrast, no association between vigorous activity and breast cancer was noted among women who were overweight or obese. In addition, we observed no association between non-vigorous activity and breast cancer, neither in the cohort as a whole or after stratification by BMI. We also found no heterogeneity of the physical activity and breast cancer association according to hormone receptor status.

In conclusion, our results support the hypothesis of an inverse association between physical activity and postmenopausal breast cancer. Risk reduction appeared to be limited to vigorous forms of activity. Our data also suggest that the potential protective effect of vigorous activity on postmenopausal breast cancer risk is most apparent among lean or normal weight rather than overweight women. Possible reasons for such heterogeneity include both causal and non-causal mechanisms. The physical activity and breast cancer relation did not vary according to hormone receptor status. Thus, that particular aspect of our study

revealed little additional mechanistic insight into breast cancer etiology. Future studies designed to evaluate in detail the relations of individual components of physical activity, including specific vigorous and non-vigorous activities throughout the life course in relation to risk of breast cancer overall and by hormone receptor phenotype will allow further insights into possible biological mechanisms of breast carcinogenesis.

REACTION:

Breast cancer is really one of major diseases that affect women. Different risk factor can contribute to the prevalence of breast cancer. But now a day there are also different treatments for this illness.

Based on this study, breast cancer is the most common malignancy among women in the US. It was estimated that 178,000 new breast cancer cases would occur in 2007 and that 40,000 women would die from the disease. And based on their study result population, the range of total physical activity varied about 2.5-fold between the means of extreme quintiles. Women reported spending an average of 1.2 hours a day in vigorous activity and 5.9 hours a day in non-vigorous activity. We first examined physical activity in relation to potential confounding factors for breast cancer. Women who were physically more active tended to be slightly leaner, to have never smoked, to have a lower level of education and to have greater parity than physically less active women. Differences between physically active and physically inactive women with respect to age at first birth, age at menopause, history of

oral contraceptive use and menopausal hormone therapy tended to be minimal.

This only show that this study can provide more information about the common risk factors that breast cancer among women may increased. This will also give each individual not just woman and us nursing students an awareness about breast cancer and its risk factors. And this should be widely disseminated to decrease the incidence of breast cancer.

REFERENCE:

http://breast-cancer-research.com/content/10/5/R92