Chief Editor Dr.Vikas Roshan

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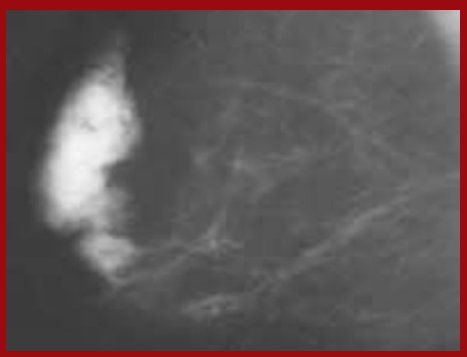
Clinical presentation of Cancer Cervix.

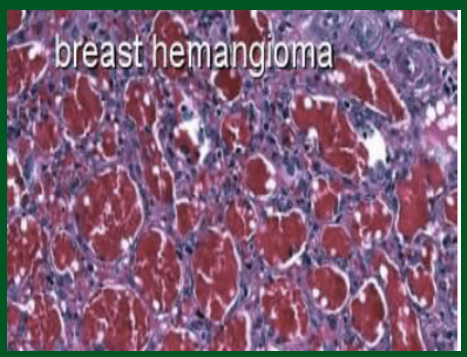
“Covid or Breast Cancer: Rainbow spectrum of severity and danger.”

Story of Cancer Survivor

Cancer Cervix Clinical spectrum



Insight into Vascular Breast Tumours



STORY OF CANCER SURVIVOR

Meera (Name Changed) Author is Cancer Survivor.

Being a single parent mother of 3 sons and holding a complete responsibility of my family survival It was the most challenging journey of my life ,but I promised myself that I'll manage the things as an another course of lessons in life to win and be a safeguard of my family.
My son's were my strength and became a reason of my living My life was busy in my family duties when I found a lump in my breast in 2015. I was working as a Travel Consultant and run my own office. When my doctor asked me to come into his office to discuss the results of my biopsy, my thought was, "I don't have time!" But my schedule didn't matter. I was BRCA1 positive and diagnosed with stage 3 breast cancer. It was frustrating to find myself unable to remember names, conversations, and even how to do things. As a highly functional woman used to multitasking, I felt like my world was collapsing around me and that I was powerless. Thankfully, friends and family rallied around me. I also relied on prayers, mindfulness, and support groups as I went through eight rounds of chemotherapy and follow-up surgeries

"Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time."
~Thomas A. Edison

After five years, I don't feel out of the woods from cancer. I again im 2020 gone with recurrences of my Breast Cancer this time on my right side also a big cyst of 3,5 kg in my abdomen . Again went through both the surgeries which was a long 12 hours surgery and thankfully by God's grace I came out successfully . I am sharing all this as bcoz I always had a positive attitude and a faith in my Doctor and God. Always keep an aim to win the situation with having faith in Matarani.

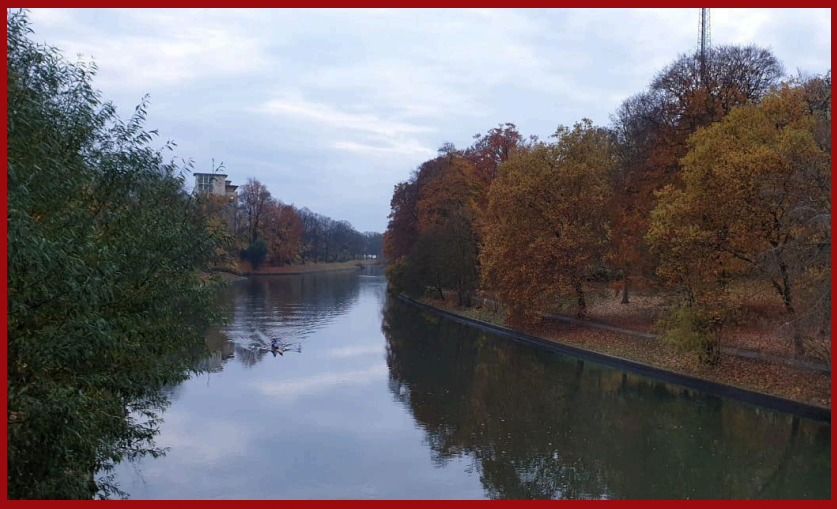
After my first treatment I've done everything possible to reduce my risks, yet every ache, pain, test, and scan reminds me that another diagnosis could be just around the corner. Because of this, I refuse to wait to do the things I want in life—if I want to do something, I go out and do it. As I now tell people: Self-love and self-care is not selfish. It's self-preservation. We always believe in saying that sharing is caring.

Insight into Vascular Breast tumors:Angiolipoma and Hemangioma

A vascular or 'vascularized' tumor is one which contains many blood vessels and is richly supplied with blood. There are often increased vascular components in many different kinds of breast tumors, including breast cancer tumors, but the classification of 'vascular breast tumors' refers basically to two benign tumors, not associated with malignant breast carcinoma or other common fibrous breast changes.

These are angiolipoma, and hemangioma, and both can occur anywhere in the body and rarely occur on or within the breast.

An angiolipoma is essentially a breast lipoma with prominent vascular features, while a hemangioma is pretty much just a buildup of blood vessels. There is a third possibility, however, of a malignant vascular tumor called an 'angiosarcoma', which can also occur within the breast. It is important therefore to arrive at a secure differential diagnosis. Clinically palpable vascular breast lumps are usually quite obvious due to their red or bruise-like appearance. However if they are discovered mammographically and seem a bit lower in the breast tissue, it can be a bit more of a concern and a bit more of a challenge diagnostically.



Life isn't about finding yourself. Life is about creating yourself. George Bernard Shaw

It is estimated that about 2/3 of all vascular breast tumors turn out to be malignant, (most likely angiosarcomas). The location of the vascular breast tumor can often be indicative of it's malignant or benign nature. From an anatomical perspective, breast tissue is located between the anterior and posterior layers of the superficial pectoral fascia. Most benign vascular breast tumors such as angiolipomas and hemangiomas will develop in the subcutaneous fat just in front of the pectoral fascia muscle, and not within the breast parenchyma itself Most vascular breast tumors which occur within the breast parenchyma turn out to be malignant angiosarcomas. Tumor size can also be an important characteristic for distinguishing angiosarcomas from hemangiomas. Angiosarcomas of the breast are rarely smaller than 2cm in diameter, while breast hemangiomas are almost never larger than 2cm.

Hemangioma of the breast
A hemangioma is essentially an abnormal buildup of blood vessels in the skin or internal organs, and they are usually diagnosed by physical examination. If they appear on the surface of the skin, they will often look like a 'ripe strawberry'. If breast hemangiomas occur 'just beneath' the skin, they will usually present as a 'bluish' swelling. Hemangiomas are generally very soft and 'squishy' to the touch.

Insight into Vascular Breast Tumours

Dr.Nadeem Niyaz Jan
DNB,FRCS(Edin),FEB VS,FICS.

These ‘conventional‘ and typically childhood related hemangiomas, which can nonetheless occur in or on the breast at virtually any age, are often broken into two distinct types which are based on the size of the blood vessels involved. ‘Capillary‘ breast hemangiomas tend to have very small blood vessels, while ‘Cavernous‘ breast hemangiomas are jumbled growths of blood vessels fed by numerous tributary arteries (which makes them very difficult and risky to remove surgically).

Mammographically, a hemangioma will usually appear as a well circumscribed oval or lobular shaped lesion, which may contain macrolobulated margins, that may contain calcification. A radiologist will probably interpret a breast hemangiomas as a BI-RADS classification of category 3, or ‘probably benign‘, mostly due to ‘heterogeneously dense‘ parenchymal breast tissue. Sonographically, most breast hemangiomas also appear oval in shape, isodense, and often with well-circumscribed margins, but sometimes with poorly defined margins.

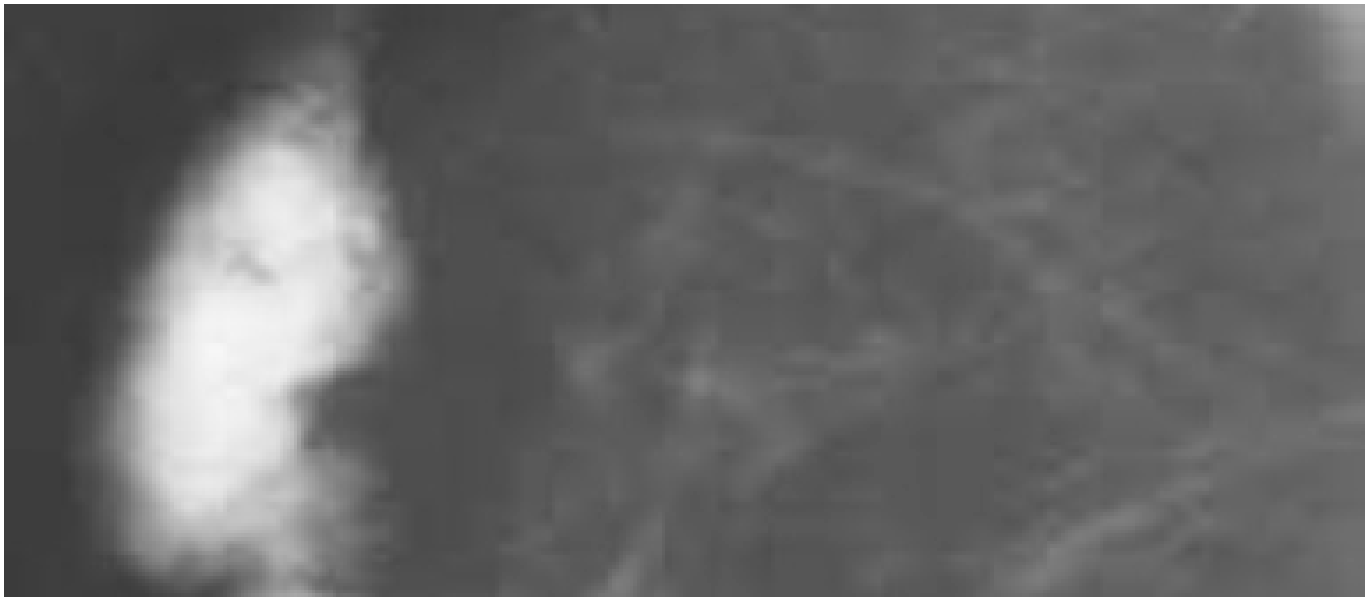
From caring comes courage.” ~Lao Tzu

Breast hemangiomas may occur in both men and women, but for some reason they are about 3 times more common in women, leading to some speculation that their development in adults might in some cases be related to estrogen levels. Two basic types of breast hemangiomas: capillary and cavernous Breast hemangiomas are thought to be caused by a proliferation of vascular endothelial cells. They are most often associated with either infants or juveniles, and tend to occur on the skin or in the head and neck region.

Small, incidental Breast hemangiomas are sometimes called perilobular hemangiomas Microscopic breast haemangiomas have also been known to be found in mastectomies of women with confirmed breast carcinoma. These tiny breast lesions (2 mm or less) consist of a meshwork of thin-walled, dilated vascular channels. Sometimes they develop within a breast lobule, or else in the extra-lobular mammary stroma. There can be atypical features such as hyper-chromatic nuclei and focal anastomoses, but no firm connection has been made between atypical perilobular breast hemangiomas and

Breast hemangiomas tend to have non–hyperechoic, (i.e., hypoechoic, isoechoic, or complex) echo textures, but there is quite a bit of variability in this regard. The relative echo-textural heterogeneity could be related to the presence of multiple small vascular channels that are often associated with breast hemangiomas. The ultrasound image of a breast hemangioma shown below show a heterogeneous, ill-defined, superficial, lobulated mass.

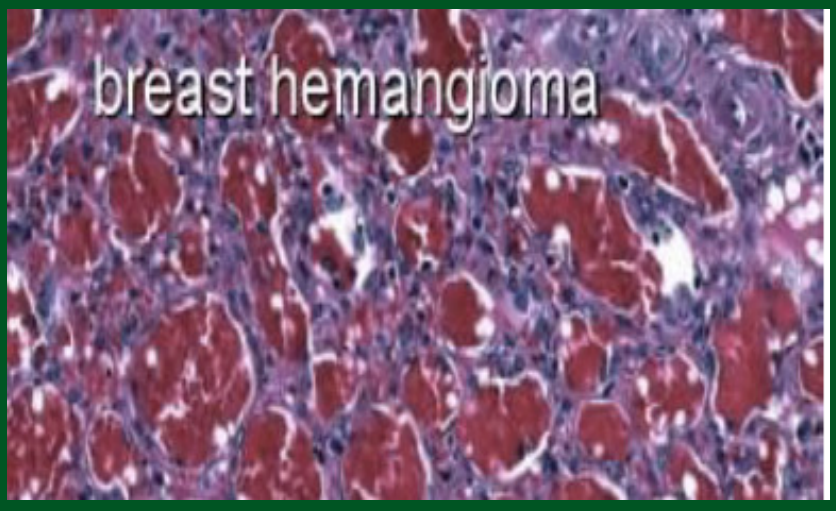
Breast Tumours



Angiolipomas, which can also be termed 'lipoma cavernosum', most frequently develops just after the onset of puberty, but breast angiolipomas can develop in adults as well, right up into old age. Breast angiolipomas may be painful The typical clinical presentation of a breast angiolipomas is of a painful, tender, and poorly marginated mass. Sometimes there can be nerve compression associated with angiolipomas, and this can result in neurological deficits. When breast angiolipomas are situated a little deeper within the breast an only visible mammographically, there are usually no overlying skin changes.
The cause of breast angiolipoma is completely unknown, and they have not been known to undergo malignant transformation. Two subtypes of breast angiolipoma: infiltrating and non-infiltrating Two basic sub-types of breast angiolipomas are often described.

These are the 'non-infiltrating' type of breast angiolipoma, which is actually more common in men, and the 'infiltrating' type of angiolipoma of the breast, which occurs in both children and adults of both sexes. Infiltrating breast angiolipomas are quite rare,

and may infiltrate extensively into surrounding fibrocollagenous tissues, muscles, and nerves. Neither type of breast angiolipoma is associated with malignancy.



Covid and Breast Cancer

Dr. Suneel Mattoo M.S., M.Ch. (SGPGI), FMAS, DMAS ,
Consultant Breast and Endocrine Surgeon.

SARS CoV-2 has taken a toll on the whole world with more than 18 crore cases reported so far and about 5 lakh active cases at present. The rising burden of screening, patient management, quarantine and vaccination coupled with a shortage of health care staff and doctors has led to a state of crisis at many places. The disastrous second wave has turned a nightmare for India which is trying hard to vaccinate people as soon as possible to prevent further waves sweeping across the nation. Many major hospitals have turned into Covid centers, and this has affected the patients suffering other diseases in various ways. While some have not been able to turn to health centers and hospitals timely due to intermittent lockdowns, others have preferred to remain confined to their homes and suffer in silence due to fear factor which has proved a lot detrimental for cancer survivors. Most doctors have started to notice more advanced, neglected and difficult to treat cancers in their clinics. This silent effect of the pandemic is currently being overlooked and hence, one can imagine that the current under-1000 daily mortality currently being reported due to direct effect

« The disease spectrum of Covid infection varies from mild to severe to potentially fatal. »

Covid is just tip of the iceberg. Diagnosis of cancer is a high priority exercise. Any suspicious lesion must undergo biopsy to establish a diagnosis even during Covid era to prevent delayed diagnosis of an aggressive cancer. A non-cancerous lesion can then simply be followed. “Covid or Breast Cancer: Rainbow spectrum of severity and danger”
Problems are not stop signs; they are guidelines. The disease spectrum of Covid infection varies from mild to severe to potentially fatal.

Similarly, not all breast cancers deserve the same degree of priority during the pandemic. Those who have large and advanced cancers, those which are bleeding or have a foul-smelling disease ethically deserve priority. Such patients are not denied admission and urgent treatment is provided at any cost as it can be potentially lethal for the patient.
Those who have already been operated upon and present with a complication also deserve priority treatment as we are bound by laws of the state and ethics of the human society.

On the other hand, surgery for low-risk cancers like ductal carcinoma in situ may be deferred in a difficult situation without any potential negative outcome on patient’s life.
The treating doctor may sometimes like to discuss alternative initial treatments like hormonal therapy and radiation therapy in low-risk breast cancers with his patients when the local cases of Covid-19 are overwhelming.

Covid and Breast Cancer- What I need to know ?

It would be prudent to mention here that the outcome of breast cancer depends largely on its biological characteristics. Patients with a risk of poorer outcome like triple negative breast cancer (TNBC), HER-2 positive disease, axillary node positive disease or those who have competed their chemotherapy need to be operated within 6-8 weeks as further delay could potentially lead to poorer outcomes.

What we discussed so far was covid in the community. If a patient of breast cancer gets covid, it is a headache for the patient and for the oncologist alike. Since outcomes in such a situation are poor, surgery or chemotherapy may have to be delayed. But other treatment modalities like hormonal therapy may still be tried. Actually in this tug of war between 'Covidity and Malignancy', an astute physician and an informed patient have to work together to minimize harm

There are two major surgical modalities of breast cancer treatment- mastectomy and breast conservation surgery. Even during these times, breast conservation surgery can be performed, and mastectomy can be avoided. However, complex procedures with a major potential for complications should be avoided to reduce the duration of hospital stay. Breast reconstructions after mastectomy should similarly be delayed till the intensity of pandemic subsides.

Why only me" is too narrow a phrase. You are not alone.

"Breast conservation surgery is safe during Covid times" Abbreviated schedules of radiotherapy may be employed by radiation oncologists to decrease hospital visits which can reduce the burden on health care services and the chances of contracting the virus by a cancer-afflicted patient. In low-risk cancers, radiotherapy may even be avoided depending upon local scenario. Further, follow up visits can be curtailed to a great extent by arranging consultations via telemedicine. Cancer centers have already taken such initiatives and specialist consultations are available on just a phone call.

“Covid or Breast Cancer: Rainbow spectrum of severity and danger”

If a patient deserves immediate help, he is helped particularly if he is suffering from cancer. But it must be admitted that in a country like India where Government hospitals are overwhelmed on any ordinary day, situation may not always be ideal. We have witnessed enormous lacunae in our health care system when it was stretched. We also witnessed enormous efforts being put by doctors in bringing justice to patients who aptly deserve immediate attention, care and treatment. We learnt from the pandemic, we are still learning and will keep learning. Neither Covid nor breast cancer is going to be the end of this world. We will eventually conquer both. Let us pray we grow out of depression, frustration and confusion. May we empower ourselves and face this dual challenge. Let us constantly remind ourselves that human capacity of burden is like a bamboo- far more flexible than one would ever believe at first glance.

“No breast mass should be left undiagnosed”

Breast Cancer: Symptoms, Risk, Screening and Treatments

Breast cancer is the most common cancer in women in India, after cervical cancer. It is an uncontrolled growth of tumor cells in the breast tissue. Breast cancer is primarily seen in women, but it can also occur in men (specific type) in rare cases.
Symptoms of Breast Cancer ?
A lump or mass in the breast that looks distinct from the surrounding tissue.
? Change is the shape, size, or appearance of the breast. ?
Changes in the skin over the breast, for example, dimpling.
? Breast pain
? Inverted or pulling-in of the nipple
? Scaling, peeling, or flaking skin over the breast, particularly in the dark area around the nipple
? Discharge from the nipple ?
Bleeding from the nipple ?
Redness or pitting of the skin of the breast, resembling the skin of the orange.
When to consult a Doctor? If you experience a swelling or shift in the breast, see a doctor immediately. It is recommended that women who have no symptoms of breast cancer should also undergo regular screening. The goal of breast screening is to detect breast cancer at the earliest when the treatment is known to show the best results. Mammograms are commonly recommended for imaging of patients over 40 years of age. In younger patients, MRI breast is advised as breast tissue is thick and mammography is difficult to find cancer. Ignoring breast cancer can lead to metastatic disease, which leads to serious life-threatening conditions. One of the biggest reasons for high

Who is at risk? Factors that increase the risk of breast cancer include: • Family history of breast and ovarian cancer • Inherited genes that increase risk- BRCA1 and BRCA2 gene mutations • In those females where periods starts at a younger age 2 • Beginning menopause at an older age • Late or no pregnancy • History of benign breast disease • Postmenopausal hormone therapy • History of Oral birth control pills intake • Being overweight or obese • Alcohol & tobacco consumption
Types Breast Cancer Screening Tests are used to screen various kinds of cancer when a person has no symptoms. Mammography is the most common screening procedure for breast cancer. Magnetic resonance imaging (MRI) can be used to screen people at high risk of breast cancer and young patients.

Radiation Therapy: It uses high-powered beams of energy, such as X-rays and protons, to kill cancer cells. • It's given to destroy any cancer cells that may have been left in the breast and surrounding area after surgery. You may hear this called adjuvant radiotherapy. • Radiotherapy is given using Linear Accelerator External beam radiotherapy • This is the most common type of radiotherapy used to treat primary breast cancerBreast conservation surgery: This is a procedure to remove cancer while leaving as much normal breast tissue as possible. In many cases, some surrounding healthy tissue and lymph nodes are also removed.
• X-rays are delivered by a machine which directs a beam of radiation at the breast. • The x-rays do not make you radioactive, so when you leave the treatment room you can safely mix with other people, including children. Intensity

"It is during our darkest moments that we must focus to see the light." ~Aristotle

Breast Cancer

The intensity of radiotherapy can be varied, allowing different amounts of radiation to be given to different areas. The risk of side effects is lower with IMRT because healthy tissue in the area gets a lower dose of radiation. • IMRT is not available in all radiotherapy treatment centres. Volumetric modulated arc therapy (VMAT) • This is a type of IMRT. The radiotherapy machine rotates round the area being treated, continuously changing the shape and intensity of the radiation beam • Chemotherapy: Chemotherapy uses drugs to destroy fast-growing cells, such as cancer cells. • Immunotherapy: Uses the body's own immune system to fight cancer.

When you reach the end of your rope, tie a knot in it and hang on.%-Franklin D. Roosevelt

Stereotactic Radiosurgery

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Fellow Interventional Radiotherapy,Germany.

In our hospital, we are using Linear accelerator for SRS treatment, and it is based on time-tested principles. For SRS main requirement is to make patient still and to shape the beam according to the tumor shape. This beam targets tumor cells and makes them quiescent and with time these tumor cells die. There are two different techniques, one is SRS, and the other one is SBRT (Stereotactic Ablative Radiotherapy) which is the extracranial extension of SRS. For SRS technology, the patient requires immobilization, and that is done with a particular type of cast called

Common tumors that can be treated with this techniques are the Pituitary adenoma, Meningioma, Acoustic Neuromas, Brain metastasis and Recurrent Gliomas. SRS Is an OPD procedure and is painless, without any incision, and no anesthesia is required.

"Don't judge each day by the harvest you reap but by the seeds that you plant." -Robert Louis Stevenson

Stereotactic radiosurgery is the latest technique of radiotherapy in which high dose of radiation is focused on tumor and simultaneously saving the adjacent healthy tissue. Stereotaxy word is originated from Greek and Latin language that means touching the tumor in space. To treat any tumor in body space, we require its three-dimensional coordinates.This coordinate system can be used for ablation, biopsy, radiosurgery, etc. Stereotactic irradiation uses computer calculated three-dimensional coordinates to deliver a prescribed dose of radiation

double shell positioning system,and the patient underwent Contrast Brain MRI and non-contrast CT (reference CT scan) scan that is fused digitally to each other. Target, as well as organs at risk, are drawn with the help of special software and beam are placed.This complicated procedure requires around two days.On the day of delivery of radiation again one cone beam CT is taken, and it is matched with reference CT scan, and after checking any error, treatment is delivered. The patient will also require steroids on the day of therapy

Drug Nutrients Interactions-untold story of cancer disease management

Raktim Chattopadhyay

Founder and CEO,
Esperer Group.

Moreover, telling the patient to stop all supplements or even to just stop antioxidants is problematic, since patients are reluctant to give up agents that they believe will produce better outcomes and reduced adverse effects, as typically cited in aggressive marketing.The numerous contradictory reports about antioxidants in the cancer treatment setting are understandable and more easily explained to patients if we revisit the pharmacology of these agents. We focus here solely on the interactions between antioxidants and those cancer treatments that utilize reactive oxygen species

to quench reactive oxygen species, the free radicals that can result in some cancers. It is also well recognized that they can quench the reactive oxygen species created by cancer treatments.These interactions, however, occur only when the antioxidant and chemotherapy are matched.
If the molecules do not match, the antioxidant will not interact and therefore will not affect treatment. Different cancer treatments utilize a variety of different, unique reactive oxygen species for their cytotoxicity, even though they are frequently referred to as if all

« When you reach the end of your rope, tie a knot in it and hang on. Franklin D. Roosevelt »

Many potential drug-nutrient interactions can affect cancer treatment. It is important to consider these interactions given the significant use of supplements and other self-treatment options during cancer care. The challenges for oncology professionals are to determine which supplement– cancer treatment combinations are safe and to explain the risks to patients.
The solution is not to rely on drug-nutrient interaction references, as these are not as mature or reliable as drug-drug interaction science reports for consistently accurate answers.

for their cytotoxic effects Characterized by an unpaired set of electrons in their outer orbital ring, reactive oxygen species are a wellknown mechanism by which radiotherapy and some chemotherapy agents preferentially induce apoptosis in cancer cells. Antioxidants gained their fame with cancer patients as a result of their ability

chemotherapy or cancer treatments were the same. The antioxidants from dietary, botanical, and other available sources come in many different forms as well.

Drug Nutrients Interactions-untold story of cancer disease management

Some combinations of antioxidants and cancer treatments will interact, some will not, and as of today, we are not able to accurately predict which do or do not interact. When an interaction occurs, it has the net effect of reducing the dosage by reducing the number of reactive oxygen species delivered by the treatment. Since most of these treatments have a narrow therapeutic index and efficacy that is proportional to dose, even a modest decrease in reactive oxygen species can have a significant effect on outcome including reduction in disease-free survival, especially where long-term outcome is a clinical objective. The published literature regarding concurrent chemotherapy or radiation with antioxidants reach a wide variety of conclusions,
some showing improved survival and status and others, a reduction in survival. A convenient list was published by Ladas et al. When viewed in light of the governing pharmacology, however, these apparently contradictory results are understandable. Some combinations interacted, and others did not.

Unfortunately, the generalizations about all antioxidant–reactive oxygen species interactions based on these single combinations tested are misleading. Infact, it may not even be accurate to predict the interaction of a specific combination that's been tested when applied to a different patient or condition until we have a greater knowledge of the independent variables that can affect outcome. Explaining Potential Risks to Patients When the patient comes in with antioxidant recommendations based on data that appear to be too good to be true, consider that there may be other factors at play.

The most obvious explanation is that an inadvertent dose reduction from an antioxidant–reactive oxygen species interaction will likely reduce adverse effects, no different from administering a reduced dose. Also, supplements with anti-inflammatory activity may improve patient status and give the appearance of tumor response in the short term even with reduced effective dosage.
Trial data from short-term or salvage therapy, where a reduced tumor response resulting from an interaction may not be noticeable, should be viewed with caution. This is especially important in patients where long-term disease-free survival is a clinical objective, as the same interference may dramatically

"From caring comes courage." ~Lao Tzu

Drug Nutrients Interactions-untold story of cancer disease management

interfere with survival if the net effect of treatment falls below the therapeutic index In the sole long-term, randomized, placebo-controlled prospective trial to have addressed this topic, Bairati et al administered antioxidants with radiotherapy 3 for 540 stage I and II squamous cell head and neck patients and found a significant increase in relapse rate for the antioxidant arm. The same authors published again, this time adjusting for patients who continued to smoke after treatment,6 and suggested that the differences could be resolved by removing smokers from the randomization.

If antioxidants are to be used with these patients, interaction can be minimized by separating dosage by at least 4 half-lives for the drug and a return to normal dietary serum levels for the antioxidant. Both the antioxidant and the drug multicompartment pharmacokinetics should be considered. The same principles apply to radiotherapy.
Frequently Asked Questions Chemotherapy and radiation therapy are powerful treatments. How is it that a few vitamins or other relatively benign substances can interfere?

The rule of thumb is to separate interacting agents by at least 4 terminal half-lives of the cancer treatment and, for the supplemental antioxidant, return to normal serum levels. For example, it is unlikely that the cytotoxicity of busulfan (Busulfex, Myleran), with a terminal half-life of approximately 3 hours, would have a meaningful interaction after 24 hours, whereas oxaliplatin, whose terminal half-life is more than 50 hours, would be vulnerable to interference the next day and longer.

« Chemotherapy and radiation therapy are powerful treatments »

However, this adjustment has been controversial, and the authors concede that antioxidants do, in fact, interact with radiotherapy. Minimizing and Managing Interactions In terms of patient management and safety, the evidence is clear that chemotherapy agents that rely on reactive oxygen species mechanisms for their cytotoxicity, including alkylators, antitumor antibiotics, and others, should be considered potentially vulnerable to interference from antioxidant supplementation greater than dietary levels.

Cytotoxic treatments are indeed powerful, but their efficacy is governed by a relatively narrow therapeutic index, which means that dosage is already close to the upper or lower limit. The trial by Bairati et al used a modest 400 IU of vitamin E and 30 mg of beta-carotene. Patients frequently self-treat with much higher dosages.
Can the risk for an unwanted interaction be avoided by instructing the patient to avoid antioxidants within 24 hours of chemotherapy or radiation? The answer depends on the treatments and the patient.

When the route of administration is other than intravenous, the appropriate compartment pharmacokinetics is also important. You would not use firstcompartment kinetics with intrathecal methotrexate. The pharmacokinetics of the antioxidant is important as well. The half-life of vitamin E, for example, is approximately 48 hours, which puts it well beyond 24 hours for even modest dosages.

Drug Nutrients Interactions-untold story of cancer disease management

What are the most common sources of antioxidants? Vitamins A (including beta-carotene), B6, C, and E are powerful antioxidants. Minerals zinc and selenium also have significant antioxidant activity. Since these are life-sustaining nutrients that cannot be manufactured by the body, they must still be available at reasonable levels in the diet and/or with supplementation. There are also many plant-based antioxidant sources including some fruits, vegetables, and herbal medicines.

Is it safe for patients to take just a multiple vitamin during treatment? Not all multiple vitamin products are appropriate. Many have 2,000% or more of the daily value of some ingredients. It is best to find a multiple vitamin that has approximately 100% of daily values for all ingredients. Are herbal medicines a potential source of antioxidant interference? Some botanicals have more than 50 pharmacologically active alkaloids, many of which have antioxidant activity. Those that have been scientifically tested, standardized for their active ingredients, and manufactured with good quality control will behave predictably. For others, we simply don't yet have enough data to know all of their actions. When uncertain, the safest course is to assume the agent has antioxidant activity and separate it from treatment

Can diet be a potential source of interference? A normal, varied diet should not be a problem. It is useful, however, to caution patients to avoid practices that can concentrate antioxidants such as severe "mono-diets" and juicing vegetables. Also, some sports drinks and protein supplements are fortified with levels of nutrients that may interfere with treatment. 5 Many other complementary and alternative medicine products such as homeopathic treatments and traditional Chinese medicine herbs are promoted for use with cancer treatment. Are these a potential source for antioxidant interference? Traditional homeopathics are very dilute and unlikely to interact. Some products labelled as homeopathic, however, have other ingredients that are not dilute and may pose a risk. The botanicals associated with traditional Chinese medicine and other Asian healing arts face the same challenges as Western herbs, namely that we do not always know how much antioxidant activity they contain. The same cautions are recommended. Are there any other concerns when combining supplements with cancer treatments that are vulnerable to antioxidant interference?
There are many evidence-based complementary and alternative medicine therapies with demonstrated benefit when delivered in a disciplined, integrative care setting, but there are also risks for interference with treatment efficacy, increasing adverse effects, and creating new problems when administered incorrectly. Providers of these treatments frequently do not understand the technology of modern cancer care and, as a result, do not recognize potentially negative interactions.

Each life is made up of mistakes and learning, waiting and growing, practicing patience and being persistent." ~Billy Graham

Drug Nutrients Interactions-untold story of cancer disease management

Patients are also confused when the interactions produce results that are not intuitive. In cases where a supplement treatment reduces side effects, it can be difficult for the patient to understand that this may not be a wholly positive event in relationship to outcome. Patients who are anxious to do something on their own to improve the cancer journey are frequently baffled when normally healthful strategies such as juicing vegetables and fruits are described as risky.

Patient compliance and satisfaction are improved if these interactions can be explained rather than "just saying no." Compliance will be even better if a safe substitute can be prescribed in place of a supplement that is risky, especially 6 for patients who are seriously committed to using these products during treatment. Patients appreciate receiving knowledgeable guidance from their oncology team, especially when they have been receiving conflicting information.

« The soul is stronger than its surroundings." ~William James »

Summary It is recommended that patient supplement treatments be limited to those whose actions and interactions are understood; when there is doubt, one should be on the side of caution. The potential benefits of reduced side effects frequently do not outweigh the potential risk of a poor outcome. It is important to note that antioxidants represent just one of many complementary and alternative medicine treatments with the potential to interact with oncology care.

Initial patient screening for possible interactions can be accomplished by a midlevel provider with appropriate training. For patients who want a treatment plan using complementary and alternative medicine therapies, a competent integrative oncology service is strongly recommended. For the future, as we advance our knowledge with new research, it is possible that dietary and botanical antioxidants will find a place in conventional oncology care.

Clinical presentation of Ca Cervix

Dr.Aruna Turaka,MD

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Being limitless,beat the cancer as it is so limited

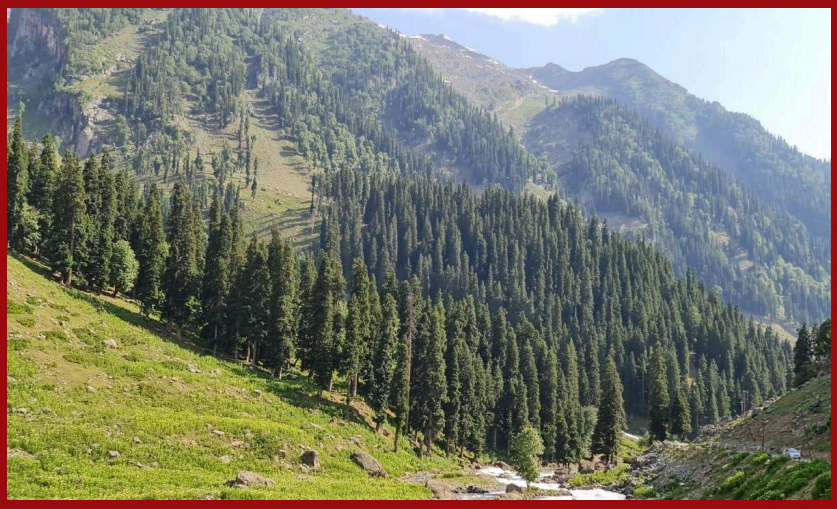
The American Cancer Society estimates almost 14, 480 new cases of cervical cancer werediagnosed in 2021, and nearly 4,290 women expected to die from cervical cancer. It was the 2ndleading cause of death in women aged 20-39 years and in 2018, around 4138 died of carcinomacervix, with 50% of women younger, ≤58 years of age at death. These numbers are staggering,especially when cervical cancer is one of the most preventable cancers in women 5th mostcommon cancer as per ACS. Fortunately, the death rate from cervical cancer has decreased bymore than 50 percent over the last 40 years, due to increased use of the Pap test and HPV(Human papillomavirus) vaccination. But the incidence of adenocarcinoma and the advancedstage disease at presentation led to increased mortality among younger women despite the HPVvaccination.

Cervical Cancer SignsCervical cancer usually does not have any symptoms until the cancer becomes more advanced.In addition to HPV, causes of cervical cancer include: smoking, multiple sexual partners,contraceptive use, history of sexual transmitted diseases (STD), having multiple children, HIVand organ transplant. Once the cancer is more advanced, women may start to notice thefollowing warning signs of cervical cancer: The most common cervical cancer symptom isabnormal vaginal bleeding, which typically occurs after the cancer has spread to nearby tissue.Although women often think bleeding is normal spotting, it's important to see your doctor if youexperience Bleeding between menstrual periods, heavier menstrual periods, longer menstrualperiods, bleeding after sexual intercourse, bleeding after menopause, bleeding after a pelvicexam and bleeding resulting in anemia-causing fatigue, dizziness. Other symptoms include lowback pain, leg pain with swelling, loss of appetite or unexplained weight loss.

Prevention & Treatment: To protect yourself against cervical cancer, the following preventionmeasures need to be considered. 1. Pap Test: Pap tests (Pap smears) look for precanceroussymptoms, like abnormal cells or changes in the cells of the cervix. Regular Pap smears are thebest method of catching cervical cancer in the earliest stages and are strongly recommended. TheAmerican Cancer Society guidelines (ACS) recommend: (1). Women start regular Pap tests atage 21. (2). From 21 to 29, women should get regular Pap smears every three years.

Clinical presentation of Ca Cervix

(3). Womenbetween 30-65 years old should receive a Pap test every five years, along with HPV testing. IfHPV testing is not done, then this same age group should continue receiving Pap smears everythree years. For women who've had a complete hysterectomy, where both the uterus and cervixare removed, then they don't need to have a Pap test or HPV test and those who women whohave partial hysterectomies, where the cervix is left intact, the screening guidelines would be thesame as any other woman Pap Test Results: "If a woman is told her Pap test is abnormal, she would repeat the screeningsix months or a year later to ensure the results were accurate. Sometimes, Pap smears result in afalse-positive or a false-negative, which is why early repeat screening is important. If the Pap test is normal but the HPV testing is positive, the HPV will be tested again within one year as well. However, if it's an especially dangerous type of HPV, then doctors will move forward with acolposcopy, a safe procedure that more closely examines the cervix, and/or biopsy.@In countrieswhere screenings are done regularly, like the U.S., only five to 10 percent of Pap smears or HPVtesting come back as abnormal. And, if immunization is done with the HPV vaccine, then thepossibility of having a positive test will be less likely.



If life were predictable it would cease to be life, and be without flavor.%-Eleanor Roosevelt.

HPV (Human papillomavirus) VaccineThe most common cause of cervical cancer is the human papillomavirus (HPV), and the bestway to prevent this cervical cancer is HPV vaccine, both for males and females, all doses of theHPV vaccine. The Centers for Disease control and prevention (CDC)@recommendations include:(1). All kids ages 11-12 should get the HPV vaccine, children are encouraged to get all doses ofthe vaccine at a young age, (2). before being exposed to HPV, (3) if teenagers and young adultsdo not get the vaccine when they are younger, women can get vaccinated through the age of 26and men through the age of 21. In addition to early screenings and the HPV vaccine, other stepsto reduce your risk of cervical cancer: practice safe sex,?especially if you've had, or plan to have,multiple partners, avoid sexually transmitted infections (STI), and stop smoking. "

Carcinogensassociated with smoking can lead to early progression of cervical cancer and other cancers, too.If cervical cancer is diagnosed, more tests, like blood work and scans of the abdomen, will allowyour cancer team to form a plan. Treatment is very effective if caught in the early stages, withhigher survival rates@at five years (more than 80 percent) after the cancer is diagnosed.

Stereotactic Body Radiotherapy
Dr.Vikas Roshan

Stereotactic Body Radiotherapy (SBRT), also known as Stereotactic Ablative Body Radiotherapy (SABT), delivering high amount of radiation to the well-defined target area using Linear Accelerator (LINAC). The main aim of the Radiotherapy is to stop the cancer cells growing and to shrink the tumor or completely destroy it. Stereotactic body radiation treatments are usually given as a single dose or up to five doses once a day, although this can vary depending on the type and location of the tumor and the patient's physical condition.

It will enable us

- Reduce treatment times with rapid leaf speeds and high dose delivery
- Provide the potential to deliver SBRT/SRS in a standard time slot
- Lower non-therapeutic doses to protect organs-at-risk and potentially reduce the risk of secondary cancer Radiotherapy planning steps for SBRT: Mould Room Procedure: Radiotherapy Planning starts with immobilization. The immobilization is a procedure; where we will prepare the thermo plastic mask or Vaclock of the body being treated.

to improve the accuracy of the treatment. Contouring and Planning: The acquired images will be transferred to the Contouring system. Radiation oncologists will delineate the Target and Critical organs based on standard clinical guidelines. Medical Physicist works with Radiation Oncologist to develop a treatment plan. The main aim of our planning is give maximum dose to the tumor and less dose to the nearby critical organs and normal healthy tissues. Clinically approved plan will be scheduled on machine. Delivery Quality Assurance: (DQA) To ensure the correct treatment delivery, before treatment to the patients, the scheduled plan in the machine will be exposed

> « Give light and people will find the way. Ella Baker »

The best candidates for this procedure are patients with small, well-defined tumors who cannot tolerate surgery. For some patients, SBRT may be able to replace surgery as a primary cancer treatment.SBRT treatment the dose delivered to the tumor per day is much larger than in a standard conventional treatment. This allows us to complete the treatment over a shorter length of time.

This will help to the patient to stay in the correct position during your treatment. Acquiring Image The next stage of radiotherapy is to perform a CT (computed tomography) scan – we will call it as CT simulator procedure. This takes a series of images of the area to be treated. During the CT imaging the lead fiducials will be placed over the mask to identify the imaging coordinates. This coordinates will be used during the first day of treatment for the accurate patient setup.
The patients may also have other scans, such as an MRI (magnetic resonance imaging) scan

in phantom material and the same will be compared with approved plan.
Treatment Delivery: The patient will be positioned on the treatment table as like in mould room procedure. Before each day of treatment delivery we will image the patient using cone beam CT to ensure that the radiation is hitting the tumor at exactly the right spot. We may also use a special treatment mode (Flattening Filter Free Beam) that allows our machines to deliver dose at a much faster dose rate.This enables us to minimize the time the patient spends on the treatment couch. The total treatment delivery will take approximately 20 minutes, which is including the patient setup, setup verification and treatment delivery.


Oncofacts presents
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Conclave-2021"
Dates to be Announced
Soon.