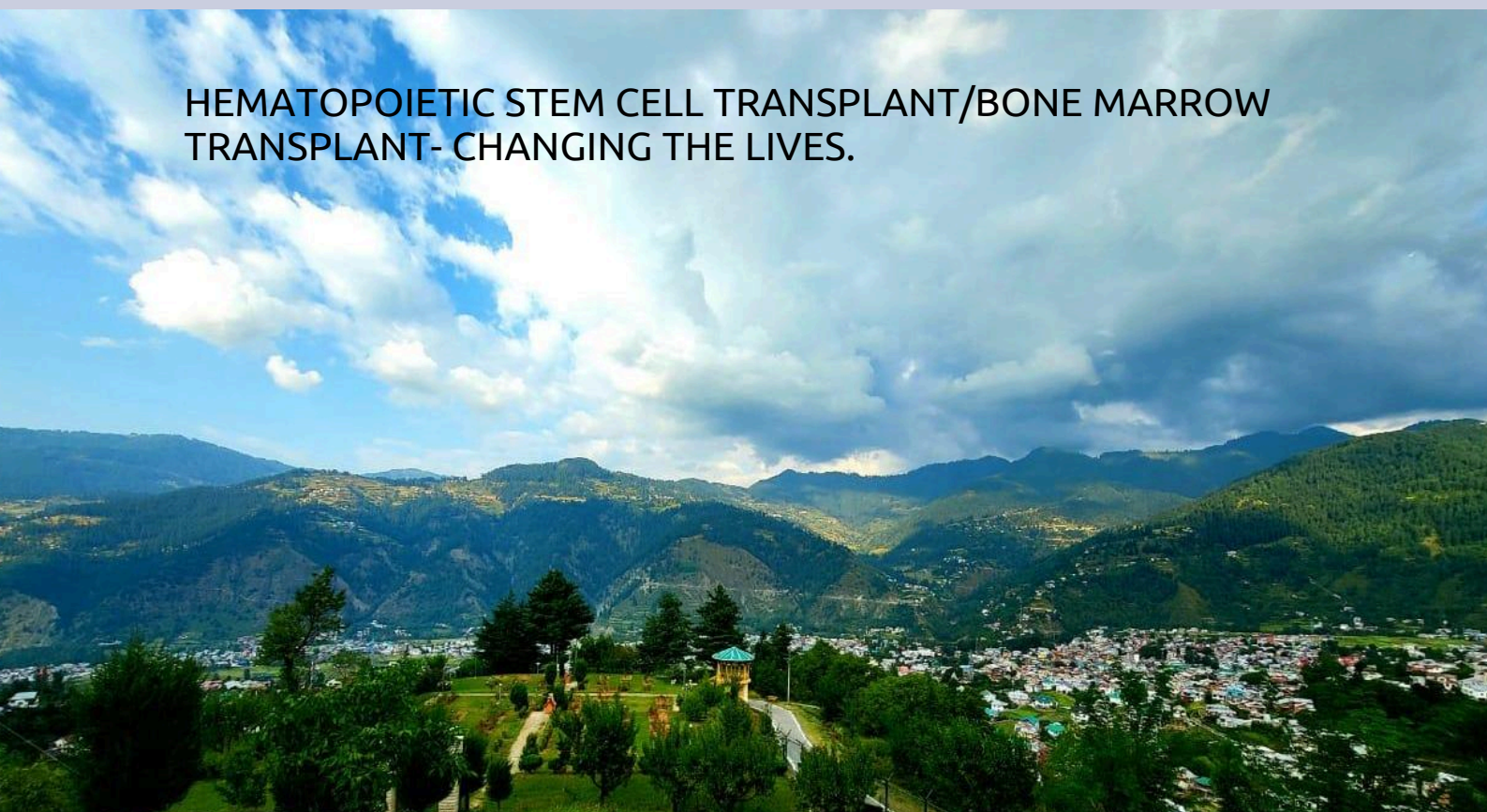


Onco-illuminati

HEMATOPOIETIC STEM CELL TRANSPLANT/BONE MARROW TRANSPLANT- CHANGING THE LIVES.



Diet, Nutrition and Cancer prevention



ACHIEVING THE SOLACE IN LIFE BY PERFORMING ACTS OF HUMANITY



Advocacy for Cancer Control



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Prostate Cancer Prevention and Management



FROM EDITORS DESK

Dear Readers, it gives me immense pleasure to portray the role of editor for oncoilluminati. This is fourth edition on the oncoilluminati timeline and with time responsibility on my shoulders has increased. The readership of this magazine has increased to three thousand. It's my duty and responsibility to keep this awareness magazine up to the mark. This venture needs support and if anyone wants to join us please feel free to contact at oncofacts@gmail.com. Thanks and Regards, Dr. Vikas Roshan.





**SOMETIMES YOU
HAVE TO FIGHT
MORE THAN
ONCE TO WIN
THE WAR
AGAINST CANCER**

#Oncofacts

Diet, Nutrition and Cancer prevention

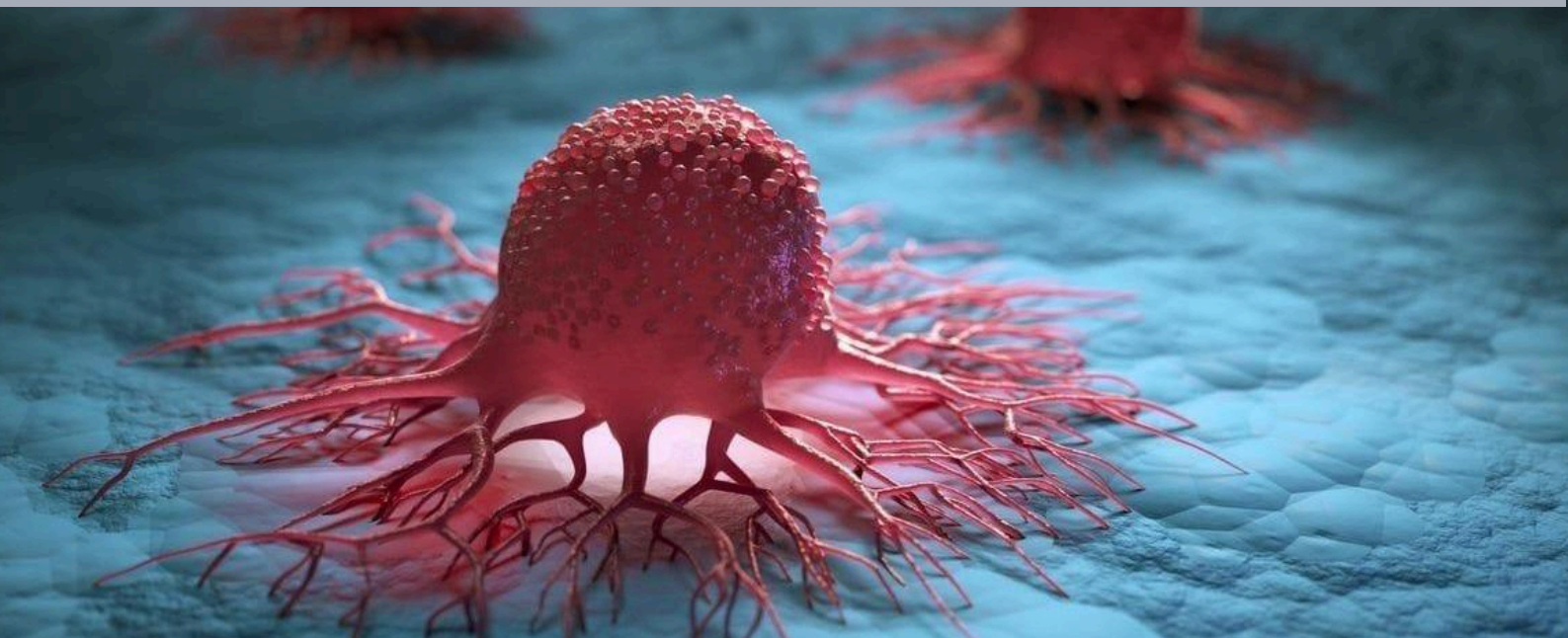
As per recent literature, the American Institute for Cancer Research published a report that revealed that 40 per cent of all malignancy cases could be prevented by following a healthy diet and lifestyle.



**Dr. Vikas
Roshan,
Senior
Consultant,
AOI-ASCOMS.**

Nutrition is so basic that most of the time it is just taken for granted or completely overlooked. Nutrition in cancer is very important and its role is getting defined but still considered as a new science. I am sure in the coming future it will open new dimensions in the life of cancer patients. We are still studying the impact of malnutrition in rapidly evolving oncology. Day by day research started mounting evidence but still, its application remains inconclusive. Moreover in our daily clinical practice, we won't discuss much it but I believe it could be a game-changer if acknowledged properly. Recently I was going through the literature for writing this article and I came to know that there are two principles that have proven beyond doubt that nutrition can sustain the patient and it has a supportive role in the treatment of cancer. Personally and experimentally I feel that it helps patients in handling the stress of treatment, it can reduce side effects, improve tolerances to treatment and it plays a significant role in improving quality of life. Proper and balanced nutrition helps in fighting cancer and recovery from side effects. There is no special diet that will replace the treatment but no doubt nutrition along with treatment can do wonders. Literature reveals that there is a better chance of recovery from surgery, chemotherapy and radiotherapy when the patient is taking adequate calories. It improves immunity and makes you less susceptible to infections. Patients who eat a balance of protein, fat and carbohydrates are better at maintaining strength.

Diet, Nutrition and Cancer prevention



As per recent literature, the American Institute for Cancer Research published a report that revealed that 40 per cent of all malignancy cases could be prevented by following a healthy diet and lifestyle. On Independence Day, we have compiled information regarding a healthy diet that may reduce cancer.

1. Stuff yourself with Fibre

Plant and fruits contain Fibre, which helps remove excess hormones that could lead to certain types of cancer, including hormone-dependent breast and prostate cancer. Fibre also reduced transit time for waste from the digestive system, which plays a vital role in preventing colorectal cancer. Fibrines, when added adequate amount to diet, can also lead to achieving a healthy weight.

4. Drop the Smoked and processed Meat

WHO reported that processed meat like bacon, sausages leads to colorectal cancer. These are classified carcinogens that generate cancer. Fifty grams of processed meat increases the risk of cancer by 21 %, as per studies. Even intake of 120 grams of red meat leads to a 28% risk of colorectal cancer. It also increases prostate cancer.

2. Colourful food matters

The Rainbow diet includes all minerals and fibres, and it helps the body to fight cancer. The fruits and vegetables include cancer-fighting compounds like beta carotene and lycopene. Vegetables, such as broccoli and cabbage, have been linked to a reduced risk of colorectal cancer, lung and stomach cancers. In contrast, carotenoid-rich vegetables, such as carrots and sweet potatoes, have been associated with a reduced risk for breast cancer.

5. Is going vegan is the only option?

Research linked high intake of fat dairy lead to a higher risk of breast and prostate cancer. Research involving the national cancer institute found that even 1/4 th to 1/3 rd cup of dairy milk daily can lead to cancer. One cup per day increases the risk of cancer by 50 per cent. It also increases prostate cancer.

3. Yummy Soy

Soy products lead to decreased risk of recurrence and mortality associated with cancer. In addition, as per Mayo Clinic, when soy is eaten in moderation leads to a decrease in breast cancer. Studies also show that soy also decreases PSA levels and prevents prostate cancer.

6. Grilled meat

Grilled meat contains carcinogenic chemical compounds (Known as heterocyclic amines) linked with multiple cancers.

7. Shun Alcohol

Cocktails can be traded for mock-tails and alcohol-free drinks. Even one or more drinks daily can lead to colorectal and breast cancer. Smoke and alcohol interaction also increase cancer risk. The best way is to avoid smoke and alcohol. There are now lots of vegan options available that can replace meat.

Dr.Vikas Roshan
Cancer Specialist,
AOI-ASCOMS.

ACHIEVING THE SOLACE IN LIFE BY PERFORMING ACTS OF HUMANITY

The sadness that seems to be invisible sometimes reflects eye-openly when we have a bothersome look at its actual sufferers. This sadness has rendered a diversity of people lead into thorns. During this era we have such sections of the society-who are living in slums, who don't have a hand to hold a glass of water, who don't have a leg to walk, who don't have speech to address their sufferings, who don't have a home to live, who don't have even a rupee note to get themselves adequately treated, who have been discouraged by their families, who are orphans, who are handicapped roll on the roadside or foot paths.

Some years back during my MBBS college days, one day I was waiting for my College Bus at a bus - stop in Kachi Chawni Jammu. On the road-side I could see an old-aged woman who was in distress and signs of sadness were imminent on her face. I could see her in this hanging face for a minutes' period. A thought touched my soul that whether she is alright. I finally got close to her and could witness sweat was rushing down her entire face. I asked her Daadi Ji "Why you are so upset, your face is blushing with sweat. Take my hand-kerchief and clear your face." She didn't reply. I asked her again the same question. But again she reacted the same way as she did earlier. Half a minute later, she started waving at me with her hands. I could not understand if she craves for some help. She was waving her hands first at me and then immediately to the opposite side of the road. I could think if she wants to cross the road. I also mimic my hand movements in the same manner as she was waving and could get a smile on her face with nodding her head saying 'Yes'. Finally I realised that she is deaf and dumb and couldn't speak. I pulled her up, support her with ease and patience and helped her in crossing the road to the opposite side.

After crossing, she was praising at me by waving her hands towards the sky, put her right hand on my head and was saying something that I couldn't understand. The moment I left there, I dwelled deep in my thoughts and felt disheartened to see such sections of the society during this self-centered era. My friend could tell me that there are many such examples through out the Jammu city, who have been abandoned and disappointed by their families and are rendered in isolation. They leave their homes on early mornings and live for whole day in thorny bushes, returning back in evenings. Some time back one day I was travelling in local passenger bus from Jammu towards Katra. The journey though a mark of few miles but it envisioned me lessons of millions of miles. Whole through distance, I was standing as all the seats were already engaged with passengers of diversities of socio-economic classes. Meanwhile I saw two women (Mother and Daughter, age approx. 60 and 45) whom I found initially standing, then surprisingly sitting on the floor of the bus. When I look towards the floor, it was washed with the vomitus that one of the women (daughter) had went through an excessive episode of vomiting. I could see the heaps of prescription files and medicines in their carrying bag. Later, I came to know that she is suffering from a serious neurological disease. The conductor of the bus was consistently shouting at them to move out of the bus. When I discovered as why he(conductor) was shouting at them, he told me that they are not paying their bus fare. I found them from very poor family that they couldn't afford now bus fare.

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I told the conductor "I would pay bus fare on their behalf, please don't force them to move out. They are humans. We are all humans". Anyways, I paid the required amount for their bus fare. But deep in my heart, I was weeping. I controlled my tears with difficulty. Life is not as cozy as we think. Seating a cozy car and enjoying life of personal gratification is dead unless we really get to realise the real purpose of it.

Besides personal upliftment, if we could help the poor, alleviate them from their suffering, that fills a part for the true purpose of our life. If we unear our attention and remain unconscious towards these sections, then we are not living life of dignity. To live life with dignity, bliss and happiness, we must take serious note of it.

Few weeks ago I was having breakfast in a cafeteria. While eating, I could see a man seemingly from a very low socioeconomic background accompanied by his wife and two children - both merely seeming under 10 years of age. The man made his wife and two children sit on chairs around a table - as usually available in cafes or cafeterias. The man bought a bottle of juice hardly of around 30 rupees and went to sit on a chair along with his three family members. On completing one ounce of juice, one member of the family was passing the bottle to another member for their ounce and so on till the juice in the bottle would finish. The two little children were helplessly with innocent eyes looking on the people who were passing by with their friends and family - some carrying delicious food, some with high quality snacks, chocolates, ice creams and other food stuffs, costing to lucrative amounts on average. On seeing this heart - melting scene, I could remember the first 'aaya mubarka' from Holy Quran - IQRA (meaning 'read'). IQRA does not only mean to read books, gain/acquire knowledge besides it means to analyse and read scenes like this in our society. You have to read them, approach to them and offer a voice to their voiceless signs of helplessness. If our children deserve a chocolate of 100 rupees, won't these voiceless children deserve a chocolate of just 10 rupees? Many of you would be witnessing such scenes in your day to day life but have you ever read them? Dear friends we are blessed by Almighty Lord with bountiful of blessings and surely it is our responsibility to take care of the poorer sections in our society. We have to become the voice of voiceless. Let us make a commitment together to offer them the Foods they want whenever we witness such scenes in our society.

Om Prakash, 70 years old, nowadays a cobbler by occupation lives in R. S. Pura Jammu. He is actually a native of POK. In 1947 on partition of Baharat into India and Pakistan, when Om Prakash was not yet even born, his family migrated to Jammu. In 1965, when Om Prakash was just 16 years old, he started working as a labourer and moved outside the state of Jammu and Kashmir. He had worked as a labourer in many states of India like Rajasthan, Maharashtra, Gujarat, Punjab, Haryana and almost every state of northern India. He for some time worked as a truck - conductor in Maharashtra. Since, he found that job not suitable for him as he always used to do work with dignity and "dignity of work", as he said is the most important thing that keeps you honest and humble in your life. In 2002, he came back to Jammu and started working as a Cobbler. Since then, from last 17 years, he is working as a cobbler at a place in Panjirithi Jammu, just opposite to the Jamia Masjid of Ustaad Mahalla. I most often used to visit this cobbler during my MBBS college days whenever I used to went city for some work. I could get my shoes-polished there and could always see him charging a fair amount. One day I offered some extra money to him, he refused to took. On other occasion, I had to paid him an amount that was more than he could charge. I told him to keep this extra money, he refused and told that he would polish shoes next time for that extra amount of money. I could see elite class persons visiting him and getting their shoes-polished there. Anyways, the advices he put forth before me are always worth to imbibe. The good thing is that we could learn and realize a lot of things whenever we intimate such kind-hearted persons in our society. I owe a lot of respect to this man, who being in this age, is working hard with dignity and devotion to earn their livelihood and feed their family. Above all he is serving the humanity with his calibre and honesty.

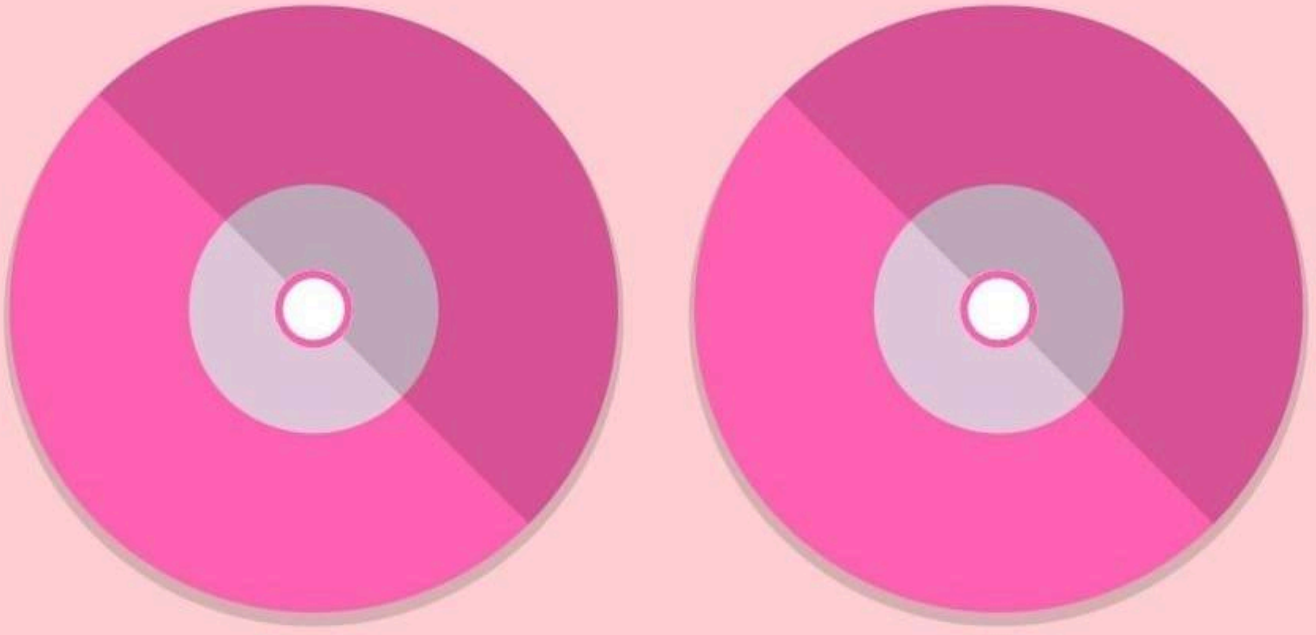


He is an inspiration that gives us courage and strength to work with passion and energy in this young age. I would quote some lines that instill us some realisation how important a cobbler is in our society, "Whenever we have to go for a party or function, we could check our shoes many times if there is any dust stitched. If we go to the party with our shoes in this mal - condition, we would fear that if anybody might tease us. That time, a cobbler is an artist who puts his whole soul in our shoes and mesh them with charm and light. And then we would feel confident and fearless enough to go to the party or function."

A doctor serves the humanity by saving lives of patients to his/her level best. Honestly speaking , whenever I could receive a patient with poor -background in the hospital , my heart literally weeps for the patient's financial helplessness and unaffordability for treatment. Sometimes I along with other staff of the hospital could collect an amount of money to make affordability for treatment possible to the patient. In fact ,there are many patient- helping organizations existing in medical colleges across the state that help patients from poor backgrounds in alleviating their illness. I remember one of such organization in Government Medical College Jammu run by medical student community there. We have been created in this world as the beautiful creation by Creator of this world i.e., humans. So our motive is to serve humanity through any means to gain sympathy and merciful bliss from Almighty Lord. Performing an act of humanity is a soul key to patience, peace of mind, happiness and success. It is a soul - key that provides as a tool to remain engaged in doing good deeds all the time. Three values of compassion we should always keep in mind to instill a sense of humanity .First to consider - we all are here in this world temporarily only for a short period of time. Second, in this short period of time, let us try our best to serve the humanity according to the graces we have received. And third, let us respect each other as well as each other's job, like a shoe polisher has his own significance in our society. He puts his whole soul in our shoes and spark them with charm by his tireless work and this way we are feeling confident and fearless enough to go to parties or college, office or our work places. And to gain empathy,sympathy,peace,prosperity ,happiness and generosity in our lives - instilling a sense and performing "acts of humanity" to our maximum capability would suffice.



YOU ARE NOT ALONE



Send your story

**WE WILL
PUBLISH**

BREAST CANCER AWARENESS MONTH



ONCOFACTS.IN

When you are busy with life , Suddenly symptoms arise , Some tests doctor advise And diagnosis arrive.

Oh Dear! Life's punctuation starts ,All issues occur right now leaving dreams shattered.

Life starts treading fast To reach finishline.

But who said we are immortal anyway even sturdy has to die, Live your life fully and fast Even though death is under the veil Make your wishes and complete atleast.

Before transcending the dimensions finish your chores and wishes,

Do something to get remembered as legend So that the legacy will never end Being limitless,beat the cancer as it is so limited

Dr Vikas Roshan
Senior Consultant,
Radiation Oncology
AOI-ASCOMS.



Preventing Prostate Cancer

The prostate is a small walnut-shaped gland below the bladder and in front of the rectum. It is part of a man's reproductive system. Prostate cancer arises from the prostate gland. It is widespread, affecting one out of every nine men. The prostate gland is an integral part of the male reproductive system. This gland makes fluid that mixes with semen during ejaculation. This fluid helps protect sperm and provide a medium for sperm to travel. This urine tube carries urine and semen through the penis and out of the body. About one in nine men will get a prostate cancer diagnosis during their lifetime. Men over the age of fifty are prone to the disease. The chances of developing prostate cancer increase as we age. Sixty per cent of prostate tumours occur in men over the age of sixty-five. Other additional risk factors include Ethnicity (black men have the highest risk), Family history of prostate cancer, Obesity and Smoking. Almost all prostate cancers are adenocarcinomas (malignant tumours). These cancers start in the cells of glands that make fluid. Rarely, some other types of cancer develop in the prostate. These include:

- Small cell carcinomas.
- Transitional cell carcinomas.
- Neuroendocrine tumours. • Sarcomas.

SYMPTOMS AND CAUSES

Early-stage prostate cancer rarely causes symptoms. However, these problems may arise as the disease size increases and involve adjacent structures

- Frequent need to urinate, sometimes urgency
- decreased urine flow
- Painful urination.
- Bowel incontinence.
- Painful ejaculation
- Erectile dysfunction (ED)
- Blood in semen or urine.
- Lower back pain.
- Leg or feet numbness.

Diagnosis

• Digital rectal examination (DRE): Your doctor inserts a gloved, lubricated finger into the rectum and feels the prostate gland; hard, uneven areas indicate cancer.

• Prostate-specific antigen (PSA) test: The prostate gland makes a protein called a protein-specific antigen (PSA). Elevated PSA levels may indicate cancer.

• Biopsy: A TRUS guided biopsy to sample prostate tissue for cancer cells is the only way to diagnose prostate cancer.

MANAGEMENT OF PROSTATE CANCER

Complications associated with prostate cancer?

Some aggressive cancers spread fast outside of the prostate. Prostate cancer mostly spreads to the lymph nodes and bones. It can also develop in the liver, brain, lungs and other organs.

How is prostate cancer managed or treated?

Some people never need treatment because cancer grows slowly and does not spread. However, with treatment, most prostate cancer is highly curable. Treatment options include: • Active surveillance: Active surveillance is done when the disease is slow-growing and not causing any symptoms. • Watchful Waiting: It is done for older and frailer patients. It is similar to active surveillance, and this does not involve active treatment at diagnosis.

• Brachytherapy: This is used for small volume disease in which needles are placed directly in the prostate and after loaded with a radioactive source. • External beam radiation therapy: A machine delivers intense X-ray beams directly to the tumour. Intensity-modulated radiation therapy is external radiation therapy that delivers potent doses of radiation to the disease site. • Systemic therapies: The doctor may use systemic therapy when the disease has spread outside of the prostate cancer, and the disease is symptomatic. These therapies include chemotherapy and sometimes hormone therapy if the seen disease is localized. You may be able to try this treatment if cancer has not spread. • Focal therapy options include (HIFU), cryotherapy, photodynamic therapy and laser ablation. • Prostatectomy: This surgical procedure removes prostate cancer. Surgeons can perform laparoscopic surgery and radical robotic surgery through the abdominal route. These methods are less invasive than an open radical prostatectomy, although both effective cancer removal.

Prostate cancer, treatment side effects?

Some prostate cancer treatments may involve adjacent structures, can affect the bladder, erectile nerves and sphincter muscle, which controls urine flow. Potential problems that arise after treatment: • Some men experience urinary incontinence. People may leak urine when they cough, laugh or exercise, or may feel an urgent need to use the washroom even when their bladder is not full. This problem improves over the first six to 12 months without any treatment. • Erectile dysfunction (ED): Surgery, radiation and hormones can damage the erectile nerves and affect the ability to get or maintain an erection. It may take a year or two to get out of this issue.

In the meantime, medications like sildenafil (Viagra) can help by increasing the flow of blood to the penis. • Infertility: Prostate cancer treatments can affect your ability to produce or ejaculate sperm, resulting in loss of fertility.

PREVENTION How to prevent prostate cancer? Most men may develop prostate cancer as they get older for no reason. Prevention is not possible. However, if you have certain prostate cancer risk factors, taking these steps may help minimize your risk and catch the disease early: • Get regular prostate screenings. • Maintain a healthy weight. • Exercise regularly. • Eat a nutritious diet. • Quit smoking.



Non Hodgkins Lymphomas, Hodgkins Lymphoma, Acute Leukemias, Neuroblastoma etc. Both autologous and allogenic Transplants are performed in the Department with satisfied results. The Stem Cell Transplant /BMT Unit of Department of Medical Oncology at SKIMS is a recognized centre and is registered under Indian Society for Blood and Marrow Transplant (ISBMT) and Asia Pacific Society for Blood & Marrow Transplant (APBMT), a rare feat achieved by SKIMS. With the provision of a full Hematopoietic Stem Cell Transplant/BMT Unit under the department of Medical Oncology in the Centrally funded State Cancer Institute for SKIMS, the unmet needs of local population will be addressed to a large extent in future.

Dr.Mir Mohammad Hussain DM Medical Oncology,SKIMS Post DM Fellowship in Hemato Oncology/Blood &Marrow Transplantation AIIMS,



HEMATOPIETIC STEM CELL TRANSPLANT/BONE MARROW TRANSPLANT- CHANGING THE LIVES.

Hematopoietic Stem Cell Transplant /Bone marrow Transplant is transforming Medicine and with it the lives of increasing numbers of patients with life threatening illnesses are saved daily. It is the only curative treatment available in many cancers after failure of chemotherapy and in many non cancerous conditions. The first successful Bone marrow transplant was performed by Dr Donall E. Thomas an American Medical Oncologist in 1956 in a case of Acute Leukemia (a type of blood cancer). This landmark therapeutic procedure won the Noble Prize for Medicine in 1990 to Dr Thomas who is considered the Father of Hematopoietic Stem Cell Transplant /Bone Marrow Transplant. Hematopoietic Stem Cell Transplant/Bone Marrow transplant, a ground breaking form of treatment has contributed to the successful treatment of multiple diseases be it cancers or non cancerous diseases. Among cancers Hematopoietic Stem Cell Transplant /Bone Marrow Transplant is indicated for Multiple Myeloma, Non Hodgkins Lymphoma, Hodgkins Lymphoma, different types of blood cancers like AML, ALL, CLL, CML in blast crisis etc ,Germ cell tumors, Neuroblastoma to name a few. Among the non cancerous conditions it is the treatment of choice for Aplastic anemia, Thalassemia, Sickle cell anemia, Autoimmune diseases, various immunodeficiency disorders and some neurological illnesses. Stem cells are the building blocks of the blood and immune system and they have incredible capabilities. They can heal and repair cells and tissues, help rebuild the blood and immune system and even transform themselves into other types of cells in order to replace cancer cells or damaged cells. These stem cell are housed in the bone marrow and in very small numbers in peripheral blood. One of the richest sources is umbilical cord blood, taken at birth and stored in special blood banks. Hematopoietic Stem Cell Transplant/Bone Marrow Transplant can be Autologous transplant where patients own stem cell are used, Allogenic transplant where stem cells are obtained from a healthy related donor or cord blood transplant where stem cell are obtained from stored umbilical cord blood.



Sing your own song and
dance to your own tune
Cancer will run and hide
inside a dune,
Keep your killer instinct
high towards cancer One-
day fighter inside you will
beat it as a soldier.

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Non Hodgkins Lymphomas, Hodgkins Lymphoma, Acute Leukemias, Neuroblastoma etc. Both autologous and allogenic Transplants are performed in the Department with satisfied results. The Stem Cell Transplant /BMT Unit of Department of Medical Oncology at SKIMS is a recognized centre and is registered under Indian Society for Blood and Marrow Transplant (ISBMT) and Asia Pacific Society for Blood & Marrow Transplant (APBMT), a rare feat achieved by SKIMS. With the provision of a full Hematopoietic Stem Cell Transplant/BMT Unit under the department of Medical Oncology in the Centrally funded State Cancer Institute for SKIMS, the unmet needs of local



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CLOSE THE CARE GAP FOR CANCER PATIENT



Make a difference !

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Advocacy for Cancer Control

We are witnessing an increase in the incidence of cancer. This is mainly ascribed to urbanization, industrialization, lifestyle changes, population growth and increased life span (in turn leading to an increase in the elderly population)

By Dr Deepak Abrol MD . Author is Consultant Cancer Specialist GMC Kathua, General Secretary Association of Radiation Oncologists of India ,North Zone Chapter and Founder LBNROH a Cancer Care Foundation Trust.

Introduction We are witnessing an increase in the incidence of cancer. This is mainly ascribed to urbanization, industrialization, lifestyle changes, population growth and increased life span (in turn leading to an increase in the elderly population). In India, the life expectancy at birth has steadily increased from 45 years in 1971 to 62 years in 1991, indicating a shift in the demographic profile. It is estimated that life expectancy of the Indian population will increase to 70 years by 2021–25. This has caused a paradigm shift in the disease pattern from communicable diseases to non-communicable diseases like cancer, diabetes and hypertension. Among men, lung, esophagus, stomach, oral and pharyngeal cancers are more prevalent, while in women; cancers of cervix and breast are most common, followed by those of stomach and esophagus. **Magnitude of Problem World:** Cancer in all forms causes about 12% of deaths throughout the world. In the developed countries cancer is the second leading cause of death next only to cardiovascular diseases, accounting for 21% of deaths. In the developing countries,



cancer ranks third as the cause of death and accounts for 9.5% of all deaths. **India:** Cancer prevalence in India is estimated to be around 2.0 to 2.5 million, with over 7-9 lakh new cases being detected every year due to this disease. More than 70% of the cases report for diagnostic and treatment services in the advanced stages of the disease, which has led to a poor survival and high mortality rate. J & K J & K STATE is having Hospital Based Cancer Registries at SKIMS Srinagar and GMC Jammu and Srinagar which are witnessing an incremental rise in cancer incidence. **ADVOCACY** Advocacy for cancer control is required in any situation in order to persuade decision-makers to create an environment conducive to improving the way cancer control knowledge is put into practice. It is also needed to make General public conducive to Awareness and Screening drives. There is no single right way to advocate. The guidance provided in this article is thus not intended to be prescriptive but rather to be selected as appropriate to the regions context, and revisited as the advocacy process progresses through its planning, implementation and evaluation phases. Every year, thousands of people die or suffer from an advanced cancer that we know could be prevented, cured or cared for. Now is the time to act and stop this needless suffering! 80% of cancer patients are diagnosed late when treatment can no longer be effective. We must therefore focus on two urgent actions: • palliate the suffering of all advanced cancer patients; • promote early detection and treatment of frequent cancers and cancers that are amenable to early detection, in particular, breast and cervical cancers. The majority of low-income and disadvantaged people are at higher risk and have less power to protect and improve their health. For their sake, the time to act is now. An integrated, comprehensive cancer control strategy allows for a more balanced, efficient and equitable use of limited resources. A cancer control plan that is goal-oriented, people-centered, realistic and carefully prepared through a participatory process is more likely to translate into effective implementation. In lower-resource settings, a plan that considers the gradual implementation of a few, affordable, cost-effective and priority interventions will have a better chance of succeeding. For Example a simple way to prevent cancer and do early detection is to aware the public about benefits of cleanliness and promote and inculcate the habits of self Examinations. Breast Self Examination is widely publicized by western literature but in country like ours Self oral Examinations,



of Private parts and self appraisal of body habitus should be encouraged We all know that 40 % of cancer is tobacco related, another 20% is life style related and infection related. So by promoting Healthy life style without Tobacco and Alcohol and following Vaccination for HPV and HBV we can prevent cancer. Why is it important? 1. Cancer kills more people than AIDS, Malaria, and TB combined and the death toll is set to rise dramatically in the coming decades. 2. Two-thirds of cancer-related deaths occur in countries where resources available for cancer control are limited or nonexistent. Without significant improvement, over 17 million people are projected to succumb from this disease by 2030. 4. Many cancers can be prevented as discussed above by reducing tobacco and alcohol consumption, decreasing exposure to carcinogens, implementing vaccination programmes and promoting healthy

5. Many cancers can be cured if detected early and treated appropriately. The environment affects the growth and development of the persons behaviour body and mind.there has been a rapid increase of pollution and WHO has now marked it as a carcinogens. There are many claims regarding association of environmental and occupational factors with cancer and few of them have been proven now. We Can improve the scenario and decrease the present rising trend in cancer incidence by testing of heavy metals in Water. Manufacture, import and use of pesticides which are very injurious should be withdrawn. Registration of some pesticides has already been refused.Farmers training camps to be conducted at village, block and district levels to educate the farmers on the judicious use of pesticides.

Registration of some pesticides has already been refused.Farmers training camps to be conducted at village, block and district levels to educate the farmers on the judicious use of pesticides. Already with Launch of NPCDCS -- National Program of Control of Cancer , Diabetes , Cardiovascular disease and Stroke Government has made its good intentions very clear. To make treatment affordable Launch of Ayushman Bharat has also helped the cause. But what is needed is a concerted effort by Workers on Ground level to make these success. We should target misinformation and raise Awareness and reduce stigma attached to cancer. Anti Tobacco Campaign is the need of Hour. As we have seen in present Pandemic that diseases can be controlled by mass awareness. Similar strategy for Cancer Awareness should be Adopted. In Conclusion I assert that Cancer is preventable, if not prevented –



ONCO FACTS, in collaboration with American Oncology Institute (AOI), Jammu and Royal Nest Apartments Resident Welfare

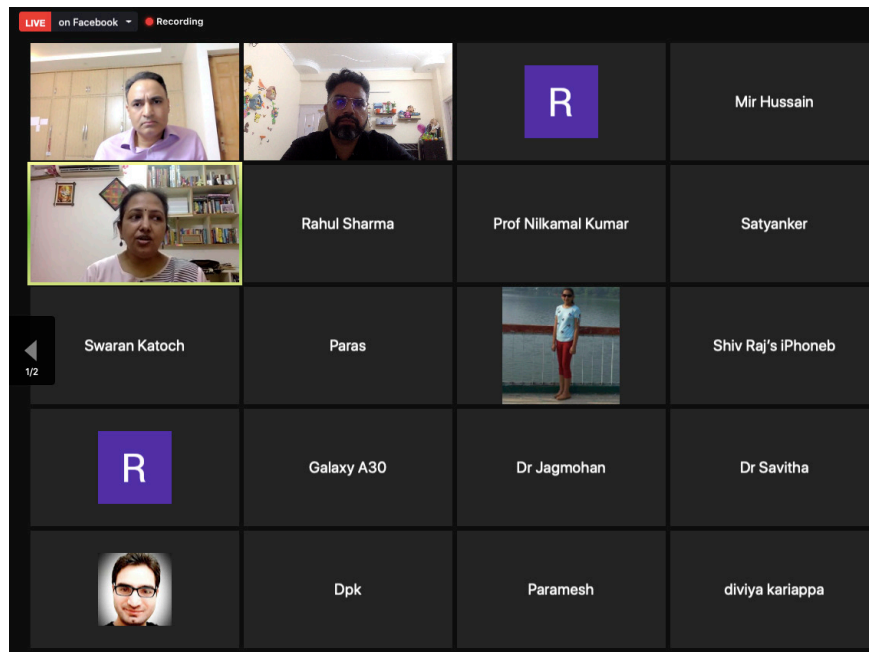
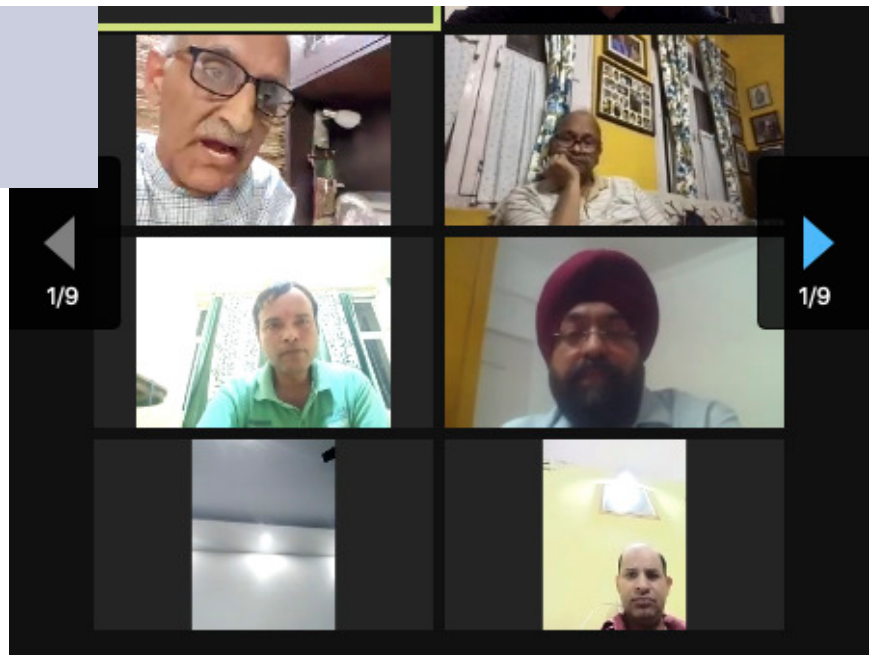
Association organised painting competition in the Community Hall of Royal Nest Apartments, Jammu. The students in the age group of 3 to 15 years participated in the competition and draw creative paintings highlighting various aspects of cancer health awareness. "The purpose of the event was to sensitize the young children for their role in health awareness through creative art", said Dr Vikas Roshan, Director ONCOFACTS. "The session concluded with prize distribution ceremony wherein the young creative minds were awarded for their beautiful paintings.



Virtual Masterclass in Early Breast Cancer

VIRTUAL MASTERCLASS ON "EARLY BREAST CANCER" HELD ONCO FACTS in collaboration with Jammu Oncology Forum on Sunday hold a Virtual Masterclass on Early Breast Cancer. The masterclass was hosted and anchored by Organising secretaries of the Program - Dr. Vikas Roshan(Consultant Radiation Oncologist AOI Jammu) and Dr. Paras Khanna(Consultant Surgical Oncologist AOI Jammu), and coordinated by Program Co-ordinator Dr. Tasaduk Hussain Itoo(Kashmir-based Physician and Columnist). The masterclass was organized as a scientific program wherein various expert faculty from premier medical institutions of India put thorough emphasis on various aspects of 'Early Breast Cancer' with particular reference to its recent advances in diagnosis, detection and treatment, vis-a-vis review in scientific literature. The program started with welcome address, presented by Dr. Rajesh Vashistha, President Association of Radiation Oncologists of India(AROI) followed by scientific speeches by various faculty including Dr. Shoma(HOD Dept. of Radiology Fortis Vasant Kunj, New Delhi); Dr. G K Rath(Head National Cancer Institute, Jhajjar Haryana); Dr. Mandeep(Senior Consultant & HOD, Dept. of Head & Neck & Breast Oncoplasty Fortis Vasant Kunj, New Delhi); Dr. Manjiri Bakre(CEO & Founder Oncostem); Dr. Vineeta Goel(Director, Fortis Hospital, Shalimar Bagh New Delhi); and Dr. Mir Hussain(Consultant Dept. of Medical Oncology & Hemato Oncology SKIMS, Srinagar, J & K). The esteemed medical faculty from various medical institutions, who were chairpersons on the occasion include Dr. Nitin Vermani, Dr. Geetanjali, Dr. Sohan Lal, Dr. R K Chrungoo, Dr. Sujeet Bhat, Dr. Gurjeet Singh, Dr. Suneel Matoo, Dr. Rakesh Thusoo, Dr. Deepak Abrol, Dr. Satyankar Gupta, Dr. Meenu Gupta, Dr. Rahul Sharma, Dr. Syed Arshad, Dr. Shabab Angurana, Dr. Jagmohan Singh and Dr. Nadeem Showkat.

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Early Breast Cancer Lesions

DUCTAL CARCINOMA IN SITU AND OTHER INTRADUCTAL LESIONS

The mammary lobule is the milk producing unit of the breast. It consists of a grape - like aggregate of acini surrounded by specialised mammary stroma. The acini drain into a terminal ductule, part of which is intralobular and part of it is extralobular.



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Few lobules and the terminal ductule that drain them form the terminal duct lobular unit(TDLU). Pathological studies have shown that most of the epithelial changes occurring in

Pathological studies have shown that most of the epithelial changes occurring in the breast, including Ductal carcinoma in situ (DCIS), originate in the TDLU. Estrogen and progesterone play a central role in regulating the growth and differentiation of normal breast tissue. Nuclear expression of estrogen receptors ER- α is present in normal ductal and lobular luminal cells. ER- β is expressed more diffusely in normal breast tissues and is present in epithelial cells of ducts and lobules the expression of ER- β does not vary in menstrual cycle but is reduced in Usual Ductal Hyperplasia (UDH), Atypical Ductal Hyperplasia (ADH) and Ductal carcinoma in situ (DCIS). It has been speculated that relative levels of ER- β and ER- α may be important in determining the risk of breast cancer and higher levels of ER- β relative to ER- α are protective against neoplastic progression. The expression of progesterone receptors in ductal and lobular epithelium does not seem to vary with menstrual cycles

USUAL DUCTAL HYPERPLASIA. (UDH) The term UDH refers to a non-neoplastic epithelial proliferation. It can change from mild to florid the ducts are completely filled and distended. UDH usually raises a suspicion of DCIS due to focal necrosis. The cells are benign, vary in size, shape and orientation, have poorly defined borders and are haphazardly arranged. Fenestrations lined by non-polarised cells are usually present within UDH, and are circumferential distribution along the periphery of a duct. UDH is associated with 1.5 to 2 fold increase in the risk of breast cancer, which may occur in either breast . the relative risk is slightly higher in women with UDH who also have a first degree relative of breast cancer. ATYPICAL DUCTAL HYPERPLASIA (ADH) ADH is very focal neoplastic epithelial proliferation confined to the mammary ductal lobular system. The cells composing ADH are relatively small and monomorphic, with round to ovoid nuclei, fine chromatin and inconspicuous nucleoli. They can also display solid foci or focal incomplete cribriform pattern, which results from arrangement of cells. These cells are morphologically similar to those composing of low grade DCIS, but they are not as homogenous. Extent of lesion is an important criterion in differentiating ADH from low grade DCIS, although there is no size cut off but DCIS is usually diagnosed when neoplastic proliferation involves atleast two separate ducts or spans at least 2mm and smaller lesions are ADH. The diagnosis of ADH applies only to lesions for which the differential diagnosis of low grade DCIS is considered but donot show the full range of

Early Breast Lesions

Breast Cancer Awareness

Fight Like A Women

Get
mammogram screening.

diagnostic features. ADH is associated with four to five fold increase in the risk of subsequent breast cancer, with equal frequency in both breasts. DUCTAL CARCINOMA IN SITU (DCIS) is defined as "a neoplastic proliferation of epithelial cells confined to the mammary ductal - lobular system and characterized by subtle to marked cytologic atypia and an inherent but not necessarily obligate tendency to progression to invasive breast cancer". DCIS encompasses a heterogeneous group of lesions that differ significantly with regard to clinical presentation, morphologic features, biomarker profile, genetic abnormalities and biological potential. In current practice, 80% to 85% of cases with DCIS are detected because of associated mammographic calcifications, which are usually rod shaped or linear branching in high grade.

DCIS or granular in low grade DCIS. Rarely DCIS presents as a palpable mass, nipple discharge, Paget's disease of nipple or constitutes an incidental microscopic finding in breast tissue removed for any other abnormality. In most cases DCIS is unicentric and has segmental distribution. Multicentric DCIS, defined as foci of DCIS in two different quadrants separated by morphologically normal intervening breast parenchyma, but this is relatively uncommon. Discontinuous growth within ducts is noted in 70% low grade DCIS, 55% of intermediate DCIS and 10% of high grade DCIS. The extensive ductal component applies when it is mixed with invasive carcinoma constitutes 25% or more of tumor mass.

DCIS is sub divided into three large sub groups: 1. HIGH GRADE DCIS- usually has high nuclear grade, solid or micropapillary architecture with central zonal (comedo necrosis). The neoplastic cells show little to no polarization. Coarse pleomorphic calcification are typically associated with necrotic debris. The periductal stroma often displays a cellular fibroblastic proliferation with collagen, chronic inflammation and angiogenesis. Paget's disease of nipple is almost invariably associated with high grade DCIS. 2. LOW GRADE DCIS- is relatively monotonous proliferation of polarised cells with round and uniform nuclei. The neoplastic cells are orderly assembled into club shaped micro papillae or cribriform spaces, a solid component is usually absent. The calcifications are often small and psammomatous

Early Breast Lesions

3. INTERMEDIATE GRADE DCIS- typically has solid or cribriform architecture and most of the cells are polarised. The nuclei have a feature inbetween the low and high grade and necrosis and mitotic activity vary. There are certain unusual variants also: a. DCIS WITH APOCRINE MORPHOLOGY- it usually has micropapillary or cribriform arcitecture. The cells have granular eosinophilic cytoplasm with large prominent nucleoloi. Nuclear atypia is moderate to severe.

An apocrine intraductal proliferative lesion composed of cells with only minimal cytoplasmic atypia should be labelled as DCIS. b. CYSTIC HYPERSECRETORY DCIS- it is characterised by cysts filled with viscid and homogenous eosinophillic material that resembles thyroid colloid. Invasive carcinoma is associated with it is usually high grade and has no specific morphology.

Based on immunoprofile there is BASAL DCIS- it constitutes about 6% to 8% of all DCIS it has intermediate to high grade morphology it is ER,PR, HER2 negative and CK5/6 or EGFR positive.

IMMUNOPROFILE: 1. LOW GRADE DCIS- diffuse and strong expression of ER- α in 90 to 100% of cells. PR is also positive in most cells. Her2 is rarely expressed but may be detected in 10% of cases. 2. HIGH GRADE DCIS- ER positive in 30-90% of cases. PR has variable expression. 70% express as HER2 enriched. 3. INTERMEDIATE GRADE DCIS- like high grade this is also an aggressive DCIS . ER Positive. The use of HER2 targated therapy for DCIS is currently in trails. All types of DCIS have strong positivity for E- Cadherin. CLINICAL DILEMMA 1. DCIS versus LCIS. This has significant implications with regards to assessment of margins and extent of surgical excision, adjuvant chemotherapy and radiation. As some DCIS has morphologic features similar to LCIS. In certain cases differential diagnosis is resolved with E- cadherin as DCIS is E-cadhrein positive and LCIS is negative. 2. MICROINVASIVE CARCINOMA- defines as invasion spanning no more than 1mm in greatest dimension. It occurs in background of high grade DCIS. Stains of MECs and Keratin are helpful to demonstrate the presence of tumor cells. To summarise, intraductal proliferative lesions are cytologically and archtectually very diverse.



Our Genes carry the instructions to make proteins, which do much of the work in our cells.



Dr. Sonali Verma
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Woman is now an important instrument of social change

Woman is now an important instrument of social change. They can contribute enormously in every field of life. About 10,000 females are diagnosed with reproductive health issues daily in our society. Various literature surveys reported that ignorance of female reproductive health issues like Amenorrhea, abnormal breast discharge, pain in armpit or in breast, blackening of nipples, cyst in ovaries, endometriosis, back and abdominal pain etc. Most females take stress due to issues of society and family which lead to hormonal imbalance. Hormones in females always regulate various types of processes like menstruation, fertility, menopause and other processes in the body. Career-oriented women always delay marriage, pregnancy, adopt surrogacy and create a reason for cancer. Shame and ignorance in our society, that are outstanding obstacles in the early treatment of breast & ovarian cancer.

We need to design a study on the basis of afterthought on the condition of women of J&K where females have been neglected in every sphere including health care. The society ruled by patriarchal laws where the gynaecological disorders are neglected. It has been tabooed on part of women to discuss such issues in public, even to health providers. Conservative treatment options are not helping in eradication of the disease. Latest and modern diagnostic tools are needed for the early diagnosis of breast and ovarian cancer. Reproductive cancer symptoms are synergistically similar to other minor gynaecological issues. There is a strong need to delineate the two systems. To the best of my knowledge and surveying published literature, there has been no genetic study in the population of J&K before 2019, where our research group serves as the first comprehensive study. Not much concern is shown to reproductive health of women beyond the child-bearing age. By keeping all the factors in mind, we need to focus on the genetic studies to delineate the progression of cancers.

As we all know that our genes carry the instructions to make proteins, which do much of the work in our cells. These gene variations can cause cells to avoid normal growth controls and become malignant. Genomic testing for risk of familial cancer can help patients to make significant choices about prevention or early diagnosis.

Genomic profiling: Need of hour in females.



Genomic profiling helps to shows high risk for Breast/ Ovarian Cancer

So, it is very important to understand that the genomic profiling or genetic testing is mandatory to avoid further discrepancies in the progression of cancers. Even though cancers are not usually a hereditary disorder, but cancers of breast, ovarian, colorectal and prostate region can be powerfully prejudiced by one's inheritances and can run in generations. We usually carry certain genes that are defensive against cancers. Getting faulty variations of such genes elevate the perils of emerging malignancies.

Electing a prognostic genomic profiling can assist in knowing your risks. Genetic tests at the level of DNA & RNA act as a predictive approach to identify the risk of development and progression of cancers. It doesn't mean you are absolutely going to carry a cancer gene. You must choose for DNA/RNA investigation if there is a strong hereditary of any cancer in your family. Genomic profiling also includes genomic psychotherapy

i.e., genetic counselling after the diagnosis, where in the counselling session you'll be recommended various preventive measures and lifestyle modifications.

Genomic profiling helps to shows high risk for Breast/ Ovarian Cancer, where you can take preventive steps to manage your risk of developing Breast/ Ovarian Cancer. You can make specific lifestyle amendments to lower your risk of developing breast/ ovarian cancer. If patients or their familial carrier will go for regular screening/preventive health check-ups and take all necessary preventative treatments. Their chance of developing cancer in advanced stages will be reduced at some extent and also help in reducing stress and anxiety that comes from a sudden expose.

Electing a prognostic genomic profiling can assist in knowing your risks.

Genomic Profiling

TO ENJOY THE GLOW
OF GOOD HEALTH
YOU MUST EXERCISE.

—
GENE TUNNEY

number of potential genes associated with the suspected cancers.

Genome-wide sequencing upsurges investigative understanding relative to targeted panels, but holds the challenges of identifying causal variants in the vast amount of data generated and interpreting secondary findings. In order to realize the promise of genomic profiling for breast and ovarian cancer, many practical, logistical, and ethical queries that go together with the execution of genomic profiling in cancers which must be addressed. The conception of evidence-based strategies for the utilization and execution of genetic analysis in breast and ovarian cancers will help to decipher genomic information into better clinical outcomes for females with breast and ovarian cancers.



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