BMCHRC

News Letter

Bhagwan Mahaveer Cancer Hospital & Research Centre

(Managed by : K.G. Kothari Memorial Trust)

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Editorial

Seasons greetings and good wishes for all of you!

Cancer is synonymous to death for most of our patients and families. Unfortunately many doctors also feel that cancer is incurable. The mystery and stigma associated with the disease is so great that cancer word is rarely used and the relatives do not want to discuss about cancer with the patient. There is tragic irony in that. Cancer is widespread. It is the second-leading cause of death and disability in the world behind only heart disease. Based on the most complete and current data cancer accounts for one out of every eight deaths annually.

It was widely thought that cancer affects only the elderly in affluent countries, Cancer has now moved beyond high income countries of the developed world to the low and middle income countries of the developing world. One recent estimate is that the overall lifetime risk of developing cancer (both sexes) is expected to rise from more than one in three to one in two by 2015. Cancer is a global challenge.

More new cases of cancer arise and more deaths from the disease occur today in the lower-income and middle-income countries.

Your suggestions and inputs are welcome.

Warm regards

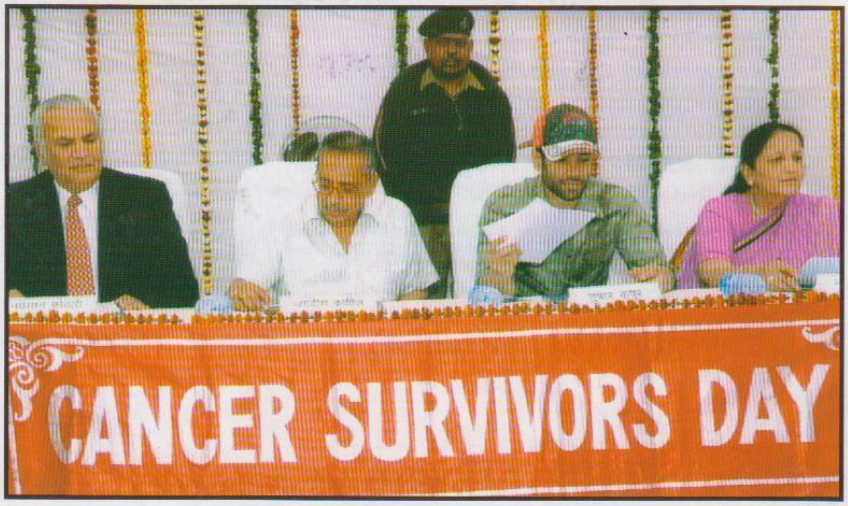
- Dr. Lalit Mohan Sharma

Happenings

• **Cancer survivor's Day** was celebrated on 08th Feb 2010. Film Actor **Mr. Tushar Kapur** was the chief guest. Cancer patients had narrated their success stories of fight against the cancer. Cancer survivors performed fantastic cultural activities. All the doctors, cancer care and nursing staff had lamp lightening activity for cure of cancer.

• **International Female Day** was celebrated in hospital on 8-9 march 2010. was focused on female cancers. Mammography, colposcopy, other test including Ultrasound was done free for more than 125 females.

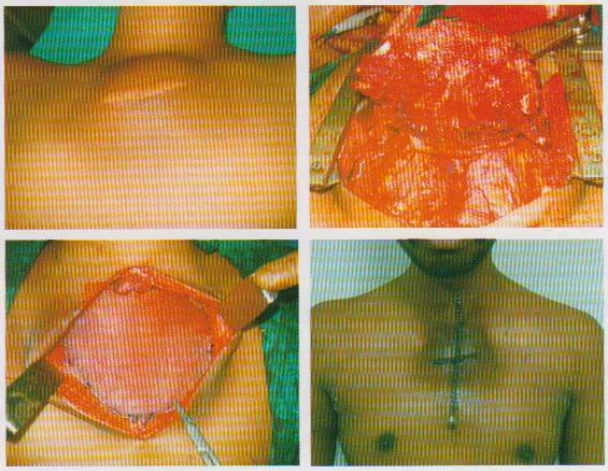
• **World No Tobacco Day** was celebrated on 31 may 2010. Tobacco hazards and Tips to quit tobacco was discussed. Chief Guest **Sh. Mahesh Joshi** (MP) addressed the crowd and motivated for quit tobacco as the best step for fight against cancer.



Cancer Survivors Day at BMCHRC

PNET Sternum - Case Report

- 18 yr male, with no co-morbid conditions, presented to BMCHRC on 3.4.09 with C/C – swelling chest wall for 2 mths, gradually increasing in size, associated with pain, dull aching in nature. Pt underwent surgery (biopsy) at local hospital in Jaipur on 27.3.09. Biopsy – round cell neoplasm. Marker studies done. Pt was diagnosed as a case of PNET Sternum.
- CT Scan chest of the patient showed lytic expansile mass involving manubrium sterni with suprasternal, presternal & retrosternal extension. Bone scan showed lesion in sternum due to primary tumor & no evidence of metastasis . USG abdomen was normal.
- Plan-4 cycles of induction Chemotherapy & then reassessment. Received 4 # CT from 17.4.09 to 23.6.09.
- Reassessed – partial response to Chemotherapy. He was advised for radiotherapy. Maintenance chemotherapy after completion of last fraction of radiotherapy. Received 6000 cGy in 30# RT on linear accelerator from 28.7.09 to 5.9.09. Well tolerated. Residual disease present after CT+RT. Reevaluated for surgery . Swelling 6X6 cm over chest wall, extending to suprasternal notch.
- Pt was operated and wide excision chest wall tumor done, with removal of upper end of sternum, medial end of B/L clavicle & I & II rib with prolene mesh reconstruction. Pt was put on elective ventilation for 2 days. Post-op period uneventful.



Chest wall reconstruction -

- Surgery is the best therapeutic choice in most cases of primary sternal tumours. Various prostheses are available for reconstruction of sternum and ant chest wall. If the defect is small then a synthetic mesh is used to cover the defect with soft tissue over it. However, if the defect is large then a composite prosthesis is created with methyl methacrylate and Marlex or PTFE mesh.

Chest wall resection is performed for a variety of conditions such as – primary and secondary tumours of the chest wall or the sternum, lung cancer, infections, radio necrosis and trauma.

- Chest wall reconstruction has been a complex problem in the past due to intra-operative technical difficulties, surgical complications, and respiratory failure caused by the chest wall instability and paradoxical respiratory movements. Advances in the fields of surgery and anaesthesia and the team effort of the involved thoracic and plastic surgeons result in more aggressive resections. **Nowadays neither the size nor the position of the chest wall defect limits surgical management.**
- Chest wall resection involves resection of the ribs, sternum, costal cartilages & accompanying soft tissues. Reconstruction strategy depends on the site and extent of the resected chest wall defect. Sternal resections and reconstructions have long been a challenge for surgeons, due to the difficulty in making full-thickness resections without compromising the stability and reconstruction of the thoracic wall. **Improvements in surgical tech now make it possible to perform even total sternectomies with good results.**

Assessment of the defect and measurements -

- Resection results in a defect in the ant chest wall exposing the pericardium and right lung. The defect in the anterior chest wall is then assessed and the prosthesis is sized. **Choice for reconstruction is a composite Marlex methyl methacrylate prosthesis.** The Marlex mesh is folded and placed on the defect and assessed.

Results -

- The surgical results of sternal reconstruction are good. Though this procedure is surgically demanding and technically challenging, good cosmetic and functional results are achieved with minimal operative mortality. Morbidity includes seroma, local infection, systemic sepsis and graft necrosis and infection.

- Dr. Sanjeev Patni, Dr. Dinesh Gupta

Bhagwan Mahaveer Cancer Hospital & Research Centre

(MANAGED BY : K.G. KOTHARI MEMORIAL TRUST)

Dr. (Col.) R.K. Chaturvedi
MBBS, MHA (AIIMS, New Delhi)
Executive Director

An Appeal From Executive Director

ISSUED IN THE INTREST OF CANCER PATIENTS

Dear Doctor,

Seasons greetings from BMCHRC, Jaipur

Bhagwan Mahaveer Cancer Hospital & Research Centre had been in the fore fronts in crusade against cancer through various activities, we try to contribute our bid to spread awareness, education, early diagnosis, treatment and rehabilitation of Cancer Patients.

Incidences of cancer are increasing every passing day in India, making it the second largest killer after cardiac diaseas. It is further estimated that fresh cases of cancer annually among men will increase from 4.47 lakh in 2008 to 5.34 lakh by 2020. As you all are aware, Bhagwan Mahaveer Cancer Hospital & Research Centre, Jaipur is dedicated towards cancer diagnosis and treatment and its team of qualified doctors aspire to provide patient care with accatable standards using hi-end technology like Digital Mammography, C.T. Scan,PET-CT, Gamma Camera I.M.R.T/I.G.R.T., Rapid Arc Linear Accelerator for the diagnosis & effective management of Cancer.

Continuing our mission of optimal cancer care to the people of Rajasthan, it gives us immense pleasure to inform you that **Bhagwan Mahaveer Cancer Hospital has installed Biograph 16 PET/CT scanner (16 slice) a first-of-its-kind technology in Rajasthan.** With this, metabolic scanning technology, it is now possible to identify cancer lesions at a very early stage, thereby helping in early diagnosis and proper treatment delivery to better disease management. The latest technology of LSO crystals and high definition PET (HD.PET) technology allows fast scanning speed and enables distortion free image quality, allowing the physician to precisely visualize even the tiniest lesions with unmatched contrast and clarity. This will help in reducing cost of treatment as matastatic stage can be found early and also we can find weather Chemotherapy is effective or not.

We can provide free pickup and drop facilities to your patients with in city limits of Jaipur, free overnight stay for out side patients will also be looked after by us so that patients of weaker section of society can be taken care of.

If you wish to refer any patient for PET-C.T. procedures please inform Dr. J.K.Bhagat Head Nuclear Medicine, BMCHRC on 9314501683 & 9460066180, at least two days in advance so that FDG can be ordered in advance for scheduling. Other hospital services shall be offered at very reasonable cost.Since we have to get FDG from Mumbai and it has to be consumed with in 2-3 hours of arrival and the cost of FDG is very high (Rs. 46,000/- for 5-7 doses only), initially the scan will be done once a week on every Thrusday. We plan to increase frequency depending upon the requirement.

The Hospital is also recognized by Governement of Rajasthan for Medical expenses Rembursement of serving employees and pensioners.

Kindly forward your postal & e-mail address.

Best Regards,

Dr. (Col.) R.K. Chaturvedi
Executive Director

Donations Exempt Under Section 80G and 35 AC of Income Tax Act 1961

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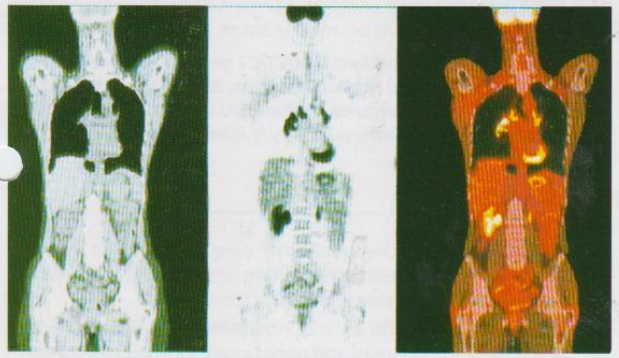
PET-CT : Positron Emission Tomography

PET-CT is the acronym for a very powerful & advance medical imaging process called Positron Emission Tomography. It has become the new standard & latest approach to imaging in the diagnosis and management of Cancer, Heart Disease and Brain disorders. It is the most advanced method for metabolic imaging and is capable of precisely localizing and assessing tumors.

What is PET-CT?

New advancement in Medical technology merges PET & CT in one combining scanning system. The anatomical image produced by the CT scanner can be merged with the molecular images form PET.

CT Scan	PET Scan	PET/CT Scan*
Organs and bones	Cell activity	Exact location of high cell activity



Introducing PET/CT at Bhagwan Mahaveer Cancer Hospital & Research Centre

Bhagwan Mahaveer Cancer Hospital & Research Centre is now offering state-of-the-art PET/CT services, allowing us to provide with superior diagnostic information for patients with Cancer, Heart Disease and certain Neurological conditions. In the three decades since its development, PET has been demonstrated to be a clinically proven and safe method for imaging a variety of disorders. In recent years, the advantages of PET have augmented by the addition of CT in the same gantry and this technology is now available at Bahgwan Manhaveer Cancer Hospital & Research Centre, Jaipur. Our specially trained Doctors, Technologists & Medical Staff is experienced in PET and CT interpretation. The SIEMENS Biograph 16. PET/CT scanner at Bhagwan Mahaveer Cancer Hospital & Research Centre combines the latest in PET technology with a state-of-the-art 16 slice CT scanner.

Rajasthan's first PET-CT was inaugurated on 23rd Oct. 2010 by the Chief Minister of Rajasthan, Sh. Ashok Gehlot, Health Minister Sh. Aimaduddian Ahmad Khan also graced the occasion.

PET scans are commonly used to investigate the following Human Conditions:

Cancer- PET scans can show up a canner, reveal the stage of the cancer, show whether the cancer has spread, help Doctors decide on the most appropriate cancer treatment, and give Doctors an indication on the effectiveness of ongoing Chemotherapy. A PET scan after starting Radiation treatment for lung Cancer can indicate whether the tumor will respond to the treatment.

Heart Disease- a PET scan helps detect which specific parts of the heart have been damaged or scarred. Any faults in the working of the heart are more likely to be revealed with the help of a PET scan.

Epilepsy- It can reveal which part of the patient's Brain is being affected by epilepsy. This helps Doctors decide on the most suitable treatments. MRI and/or CT scans are recommended for people after a first seizure.

Alzheimer's Disease- It is very useful in helping the Doctor diagnose Alzheimer's disease. A PET scan that measures uptake of Glucose in the brain significantly improves the accuracy of diagnosing a type of dementia often mistaken for Alzheimer's Disease.

Medical Research- Researchers, especially those involved in how the brain functions get a great deal of vital data from PET scans.

Why PET ?

- Metabolic information (Molecular imaging)
- Avoidance of surgery or less extensive surgery
- Single test for entire body
- Lowering the overall cost of medi-care
- Monitoring response to Chemo/Radiotherapy
- Better contrast resolution
- Safe, non-invasive procedure
- Early detection, Precise staging and quantitation

Preparation before procedure

There is very little preparation needed for a PET CT exam. Typically you will be asked not to eat 4-6 hours prior to the exam but you should drink a lot of water before the scan. If you're taking medication please consult with your physician before the exam. Most medications can be taken on the day of the exam.

Please avoid **Alcohol** and **strenuous exercise** 24 hours before your appointment. If you are **Diabetic** it is important that your Blood Sugar be in **control for at least a week** before the scan. If your blood sugar is higher then 150mg on the day of the scan the Doctors at the PET CT centre may have to correct it by injecting short acting Insulin. Alternatively your scan may be deferred till such time that your sugar comes under control. You may be asked to put on a gown for the exam, so dress comfortably and expect to change your clothes. Please do not wear any jewelry. Please bring any related test reports including CT or MRI films. PET CT Scans **are not done on pregnant patients**. So please consult with your Doctor if you think you are pregnant or missed the periods. **Plan to spend about 3-4 hours at the PET CT Centre.**

How does the procedure work ?

During a PET scan, the patient is first injected with a Radiopharmaceutical, usually FDG, a Radioactive Glucose compound. The compound distributes throughout the body and accumulates in various organs depending on the metabolic activity within the organ or tissue. Because cancer cells usually have a higher metabolic rate than surrounding cells, they absorb more of the tracer and will show up more prominently on the image. The PET CT scanner detects the FDG accumulated in glucose-avid organs or tissues and creates images that are displayed as colour-coded images.

At the BMCHRC, Jaipur, a high resolution 3-dimensional PET-CT scanner is installed which is high end sensitive equipment capable of detecting a leasion as small as 2 m.m. which means the Cancer can be diagnose before it forms a Tumor of swelling.

How procedures is performed?

Prior to the exam you will receive a small injection of Radioactive suger (FDG). You will be asked to sit or lie down on a comfortable chair or bed for 30-60 minutes while the FDG travels throughout your body. It is important that you do not talk, read, walk around or chew gum during this waiting period. In some cases you may be asked to drink medicine (Oral contrast). After this short time, the technologist will assist you to the scanner. The CT portion of the exam is completed first followed by the PET portion. An intravenous non-ionic iodinated contrast may be injected for the CT scan. It is important that you don't move for the duration of the scan. The length of the exam is determined by your height and area of interest. Most PET CT scans at our centre are typically completed within 20-30 minutes.

Once the scan has been performed you may resume normal daily activity. Even though the FDG and contrast will quickly leave your body, you can expedite the process by drinking plenty of water after you scan is complete. Your PET-CT result will not be immediately available, but the reading Physician will contact your referring Doctor to convey all pertinent information gathered from the scan. You can collect your scan report the **next day.**

PLEASE NOTE : Since the Radioactive Glucose prepared for you is expensive and has a very short life it is imperative that you keep your appointment on time. In case you need to cancel your appointment please inform us at least 48 hours ahead.

Who should not have a PET scan?

Pregnant women and women who are breast feeding should not have a PET scan as there is a risk for the foetus. Any woman who is pregnant should tell her doctor straights away (before the scan). Anybody who has just had a PET scan should stay away from pregnant women, babies and young children for a few hours after the scan.

Limitation of PET-CT

There is no major limitation of PET-CT except the cost and availability of the test.

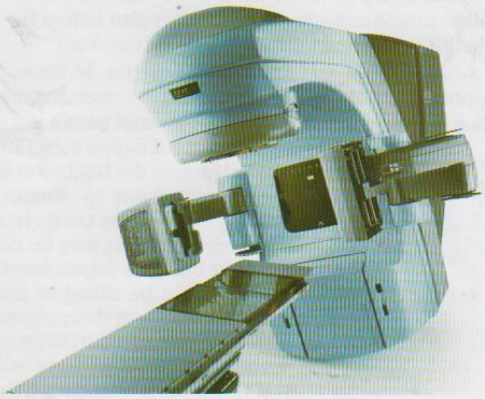
PET-CT at BMCHRC

BMCHRC has installed latest Simense Biograph-16 PET-CT scanner which is the most advance and first PET-CT scanner in the State. The System acquires patient's data using 3D volume mode and incorporates the most sophisticated reconstruction techniques. This PET-CT scanner will image the organs of body with precision and can detect the lesions as small as 2m.m.

If you wish to refer any patient for PET-CT procedures please inform Dr. (Col.) J.K. Bhagat Head Nuclear Medicine, BMCHRC on 9314501683 or 9460066180 well in advance so that FDG can be procured. Other hospital services shall be offered at very reasonable cost.

The First and only Rapid Arc in Rajasthan

A breakthrough technology in Radiotherapy



Overview:

RapidArc radiotherapy technology, a fast, precise cancer treatment installed at Bhagwan Mahaveer Cancer Hospital & Research, Jaipur, is a new approach to delivering image-guided, intensity-modulated radiation therapy (IG-IMRT). Rapid Arc Technology from Varian Medical Systems, California, delivers precise forms of IMRT up to eight times faster than is possible with conventional or helical IMRT delivery systems.

RapidArc quickly delivers a complete IMRT treatment in a single rotation of the treatment machine around the patient. The entire tumor volume receives the radiation dose in one revolution of the machine. IMRT treatments that typically require nearly twenty minutes can be completed in less than two, without a compromise in treatment quality. RapidArc dose distributions are not only fast to deliver but, they are equivalent to or better than conventional IMRT or helical IMRT for a variety of clinical sites.

Why does speed matter?

The Faster RapidArc treatments are easy on the patient, who does not need to hold still for long periods of time in order to avoid movement that could compromise treatment accuracy. It has the potential to improve the quality of care and patient comfort besides reducing the treatment waiting lists in parts of the world, like ours, where capacity is a limiting factor.

RapidArc is well suited for a variety of anatomical sites, including prostate and head and head and neck cancer cases. It can conform the treatment beam more closely to the tumor shape and protect more healthy tissues.

The technology

The linear accelerator rotates around the patient to deliver the radiation treatments from nearly any angle. During a RapidArc treatment the radiation is shaped and reshaped as it is continuously delivered from virtually every angle in a 360 degree revolution around the patient.

The beam shaping is accomplished using an important accessory called a multileaf collimator (MLC) a device with 120 computer-controlled mechanical "leaves" or "fingers" that can move to create apertures of different shapes and sizes. During a RapidArc treatment three parameters vary simultaneously : the speed of rotation around the patient, the shape of the MLC aperture, and the dose delivery rate. Rapid Arc treatment Plans are created using the Eclipse treatment planning system from Varian.

The benefits of RapidArc Radiotherapy

- **It's fast .** Highly conformal treatments like IMRT can be delivered in a fraction of the time it normally take, increasing treatment accuracy and decreasing the amount of time patients must hold still for treatment.
- **It's precise.** RapidArc makes it possible for doctors to target tumors accurately and spare more healthy tissue.
- **It's simple**. RapidArc treatments, which are delivered with a single rotation of the treatment machine around the patient, are much simpler to plan and deliver, requiring fewer steps than conventional treatments.

Installation of RapidArc, Bhagwan Mahaveer Cancer Hospital & Research Centre, Jaipur, will provide sophisticated and advanced RapidArc treatment to the patients in our region at their door step.

- Dr. Nidhi Patni
Senior Consultant
Dept. of Radiation Oncology

Breakaway: The global burden of cancer Challenges & opportunities

Cancer- the word is ripe with meaning. Most of our patients, families and many doctors still feel cancer equivalent to death sentence. The mystery and stigma associated with the disease is so great that cancer word is rarely used and the illness never discussed. There is tragic irony in that. Cancer is widespread. It is the second-leading cause of death and disability in the world behind only heart disease. Based on the most complete and current data available, cancer accounts for one out of every eight deaths annually.

It was widely thought that cancer affects only the elderly in affluent countries, Cancer has now moved beyond high income countries of the developed world to the low and middle income countries of the developing world. One recent estimate is that the overall lifetime risk of developing cancer (both sexes) is expected to rise from more than one in three to one in two by 2015. Cancer is a global challenge. More new cases of cancer arise and more deaths from the disease occur today in the lower-income and middle-income countries.

Research and Budget- In the developed world, much spending on cancer research and cancer control is fragmented and co-ordinated. In the developing world, the crisis is worsening. Government have priorities in spending for immediate needs created by the most challenging disasters, flood, drought, fire accidents, infectious disease. Patient, Family and Government wants to spend minimal for cancer management and research.

Burden in India- There are approximately 30-35 lac cancer patients at any given point of time. cancer leads to death of 50 patients each hour. Every hour 100 new cancer cases are seen in India. 4.4 lac people are dying each year as a result of cancer.

Time to act- US government proclaimed a "War on Cancer". In the US the incidence rate for new cancer cases and the overall death rates from cancer are declining. Nonetheless, the disease remains the second-largest In the past 30 years the burden of cancer doubled, based on incidence of new cases and deaths. The burden of cancer is predicted to continue growing at an alarming rate into the future with the growth coming in large part from lower- and middle-income countries where healthcare budgets are already stressed. These countries are experiencing an unprecedented surge in the incidence of new cancer cases, especially owing to tobacco use and the adoption of Western diets and lifestyles.

Key facts and findings:

- In 2009 there are 12.9 million new cancer cases globally.
- By 2020, we expect the number of new cancer cases worldwide to rise to 16.8 million.
- By 2030, the number of new cancer cases is expected to rise to 27million, with 17million cancer deaths.
- Based on a widely accepted set of estimates of global mortality from all causes, more people die every year from cancer than from infections.
- In the past 30 years, the global burden of cancer has doubled.

Cancer is a rapidly growing challenge in the developing world:

- Today, more than 50% of new cancer cases and nearly two-thirds of cancer deaths occur in the resource limited countries.
- By 2030, the developing world is expected to bear 70% of the global cancer burden.
- Cancer death rates are typically higher in the developing world because most cancers are diagnosed very late and in advanced stage. Treatment cost is also high in advanced stage.
- Many factors associated with the adoption of Western lifestyles and behaviours are contributing to the rising burden of cancer in the developing world, including increased tobacco consumption, higher-fat and lower-fiber diets, and reduced physical activity.

Challenges of cancer care in Developing world -

- Inadequate health systems infrastructure.
- Scarcity of necessary specialised skills and specialists.
- Scarcity of cancer diagnostic and treatment facilities.
- Illiteracy/Ignorance/Cultural taboos.
- Inadequate and ineffective cancer control programs.
- High diagnostic and treatment costs.
- Health care is the least priority by family, Government.

Cancer Control Program- Need for our active Participation and contribution.

- Cancer control refers to efforts aimed at reducing the number of new cancer cases and associated deaths and disability (i.e. mortality and morbidity), as well as improving the quality of life for cancer patients and their families.
- Primary areas to intervene -
  - ❖ primary prevention;
  - ❖ early detection and secondary prevention;
  - ❖ diagnosis and treatment;
  - ❖ survivorship
  - ❖ palliative care
- **Primary prevention-** Many cancers can be prevented. These include cancers caused by cigarette smoking and other forms of tobacco consumption and cancers related to chronic, heavy alcohol consumption. For other cancers, it is possible to reduce or eliminate many cancer-related risk factors, such as obesity, physical inactivity and poor nutrition. Primary prevention is meant to reduce or eliminate exposure to such cancer-causing factors, including environmental carcinogens and lifestyle behaviours.

Early Diagnosis and treatment- This is most important responsibility of doctors. Unless, we keep cancer in the list of differential diagnosis, we are likely to delay in relevant investigations. Early diagnosis and effective treatment leads to cure in more than 60% of all cancers. There is strong need for involvement of each one of us in crusade against cancer. Doctors and medical staff needs repeated training for early detection and effective treatment.

MEN

S.No.	Types of Cancer	2009	2020
1.	Lung Cancer	43,576	51,194
2.	Buccal Mucosa	29,474	46,785
3.	Prostate	25,639	30,185
4.	Gall Bladder	25,408	29,850
5.	Base of Tongue	24,330	28,584

WOMEN

S.No.	Types of Cancer	2009	2020
1.	Uterus	1,01,938	1,23,291
2.	Breast	87,603	1,23,634
3.	Ovary	29,929	36,199
4.	Gall Bladder	18,169	21,975
5.	Cervical	18,083	21,871

- Dr. Lalit Mohan Sharma

Time for evidence based cytology

Evidence-based medicine (EBM) is a fashionable and an extremely hot topic for clinicians, patients and the health service planners. EBM is defined as "the conscientious, explicit and judicious use of current best evidence in making decision about the care of individual patients.

Evidence-based cytology (EBC) is an off shoot of EBM. The EBC is concerned with generating a reproducible, high quality and clinically relevant test result in the field of cytology. This is a rapidly evolving area with high practical importance. EBC is based entirely on research data.

There is massive explosion of knowledge in the medical science particularly in basic science. There are also many newer technologies and diagnostics modalities in hand. Therefore there is a need to integrate knowledge. There is also a massive increase of health care costs and overall workload. So it is necessary to make the best use of finite financial resources. The general patients are now more educated and have easier access to electronic media. So, they demand the best quality diagnostic tests in minimal period of time. Lastly there is increasing attention of the medico-legal problems in cytology. Practicing EBC may have some role in these areas.

The various professional bodies on cytology design and recommend guidelines on the basis of evidences. Some of the guidelines are already existing like Papanicolaou's society guidelines (1999) for sputum and bronchial wash & brush, Papanicolaou's society guidelines (2003) for voided urine sample, The (2001) Bethesda system for cervical smear, Papanicolaou's society guidelines(1996) for thyroid and NCI sponsored conference in Bethesda, Maryland (1996) for breast. Once the guideline is implemented and practiced then the experiences of practicing cytopathologists may be used as a feedback to alter the existing guideline. The various facets of EBC are sampling, specimen adequacy, morphological identification and computer based expert system, integrated reporting, identification of controversial areas and high quality research for evidences.

The cytopathologist will have to combine the clinical history of the disease with the cytomorphology, immunocy to chemical findings and molecular details for précised diagnosis. In future, such "molecular cytopathologist" will play a central role in clinical decision making.

It is the duty of the individuals and institutions to practice EBC for better diagnosis and management of patients. Probably it is now the ideal time to integrate our information in more productive way for better diagnosis and management of the patients. This is the right time to practice evidence based cytology.

Overview of EBC

Identify the questions

↓

Search for evidence from research data of cytology

↓

Statistics Epidemiology Informatics ← Modify data

↓

Best Practice Guidelines

↓

Practice of EBC → Audit Practice

- Dr. Samiksha Sharma

May the festival of lights brighten up
you and your near and dear ones' life !
And bring joy, health and wealth to all of you!
Wish you & your family a very
Happy Diwali & prosperous New Year.

N.R. Kothari — *Chairman*
Anila Kothari — *Vice Chairperson*
Vimalchand Surana — *Managing Trustee*
Dr.(Col.) R.K. Chaturvedi — *Executive Director*

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