Rajiv Gandhi Cancer Institute
and Research Centre
A Unit of Indraprastha Cancer Society
Registered under "Societies Registration Act 1860"

NewsLetter

Vol. XXIV | No.9 | Price: 50 Paisa

EDITORIAL

MEDITATION-WHY & HOW?

Your healthy choices, determine your healthy state of body and mind. To stay healthy and fit, you should pay attention to right food, right exercise and right way of meditation. Why should you meditate??

Meditation works as an antidepressant. Mediation is a habitual process of training your mind to focus and redirect your thoughts. Meditation increases awareness of yourself and your surroundings. It reduces stress and develop concentration. Research has shown that meditation may improve symptoms of stress-related conditions, including irritable bowel syndrome, post-traumatic stress disorder and fibromyalgia. Regular meditation helps reduce anxiety and anxiety-related mental health issues like job related anxity, social anxiety and phobias.

Meditation can also lead to an improved self-image and more positive outlook on life. Meditation explicitly aims to help you develop a greater understanding of yourself and how you relate to those around you.(Enhance self-awareness). Several types of meditation may build your ability to redirect and maintain attention. As little as four days of meditation may have a positive effect.

Cancer patients usually undergo painful treatment regimens, stress, and emotional trauma. Several studies have demonstrated that yoga can combat fatigue and improve strength and range of motion for patients undergoing cancer treatment. Yoga practice focusing on restorative postures, relaxation, and meditation is very helpful for fatigue, anxiety, depression, and other symptoms of cancer and cancer treatment. Regular exercise through yoga is just one way of keeping the risk of recurrence at bay. Meditation can diminish the perception of pain in the brain and help treat chronic pain.

Meditation improves focus; focus improves efficiency which improves output and productivity and improved output increases job satisfaction. Meditation makes us sensitive towards others, it develops a quality of acceptance in us; it improves communication and expression. With all these qualities we are better able to bond with others and start sharing relationships.

How to get started?

People practice many different forms of meditation, most of which don't require specialized equipment or space. You can practice with just a few minutes daily.If you want to start meditating, try choosing a form of meditation based on what you want to get out of it.

There are two major styles of meditation:

• **Focused-attention meditation:** Concentrates attention on a single object, thought, sound or visualization. It emphasizes ridding your mind of attention and distraction. Meditation may focus on breathing, a mantra or a calming sound.

• **Open-monitoring meditation:** Encourages broadened awareness of all aspects of your environment, train of thought and sense of self.

If your regular work and home environments do not allow for consistent, quiet alone time, consider participating in a class.

Let us Meditate

1. Meditation is something everyone can do to improve his/her mental and emotional health.

2. You can do it anywhere, without special equipment or membership. Meditation courses and support groups are widely available.

3. There's a great variety of styles too, each with different strengths and benefits.

Dr. A. K. Dewan
Director - Surgical Oncology

COVID-19 PANDEMIC: RADIOTHERAPY PREPAREDNESS

The rapid spread of SARS-CoV-2 and its associated outbreak of COVID-19, combined with an unprecedented, near-complete global lockdown, has laid bare the weaknesses in health systems.This brought with it many challenges. One particular challenge, among the many, is the impact it has on cancer patients. Studies have shown that lower respiratory tract infections increase the mortality rate in these patients. Reviews have also shown an increase in the risk of death from delayed treatment in cancer with regards to delaying radiotherapy (risk ratio (RR) 1.16, 95% CI 1.02–1.32).This result in a difficult situation as treating these patients during these times may increase their risk of death due to the coronavirus, but delaying their treatment may also increase their mortality risk.

At a time when most hospitals drastically scaled back their services during this outbreak, at department of radiation oncology RGCIRC we made the decision to continue providing care using a proactive approach.Of equal importance, was to ensure the safety and protection of all the health-care workers involved in the department. The department of radiation oncology RGCIRChas treated few patients recently during COVID outbreak. First patient, with metastatic carcinoma breast with multiple bone metastases was evaluated for neck pain and weakness of upper limbs. MRI Spine showed bony metastases causing cord compression at C2 level. Spinal decompression surgery could not be done. Hence a decision to deliver palliative radiotherapy to cervical vertebrae was taken. During the same hospitalization she was also diagnosed to have SARS-CoV-2 positive. Priority was set high for her keeping in view the devastating effect vertebral lesion may have if left untreated. A popular 8 Gy single fraction regimen was delivered. Another patient, who was diagnosed to have SARS-CoV-2 and continued to be tested positive for 6 weeks, developed recurrent vaginal cancer. She underwent chemotherapy and surgery and was referred to radiation oncology department for adjuvant radiotherapy. Keeping in view the high-risk features and aggressive tumour biology it was decided to go ahead for adjuvant radiotherapy. A hypofractionated regimen was delivered. Delivering fractionated regimen RT was a challenge for us. Another SARS-CoV-2patient with multiple myeloma complicated by spinal cord compression was given 6Gy single fraction after surgical decompression.

Multidisciplinary expert groups around the globe have published statements on the use of specific treatment modalities and their combinations during the pandemic. Radiotherapy expert groups have published specific recommendations on radiotherapy use in response to COVID-19.

The Department of Radiation Oncology has adopted following policies during the pandemic as laid by ESTRO and ASTRO:

- Telemedicine for follow-up visit and consultation
- Screening and triage of patients before entering hospital
- During OPD consultation, minimum 1 m distance is being maintained
- Patients are being triaged and prioritized based on their diagnosis, prognosis and urgency for initiating treatment
- Number of healthcare workers at any given time are being controlled through appropriate rotation of staff or as suited for the departmental workflow
- RT is being omitted when the risk of severe complication from COVID-19 (for elderly patients and/or with serious underlying health conditions) outweighs the benefit of radiation therapy
- RT is being deferred/delayed when there is no or little expected adverse effect on outcome from the delay
- More extensive use of hypofractionated schedules are being utilized more often now with the aim of maintaining high tumor control probability rates without undue toxicity
- Appointments are being scheduled on a staggered basis throughout the day to avoid congestion at the machine-waiting area as well as OPD areas
- No visitors are being allowed in the department
- In patients with suspected or proven COVID-19 infection and who are symptomatic, RT is being deferred until resolution of symptoms or till they are deemed noncontagious by COVID treating team
- For patient with proven COVID-19 infection requiring RT were treated at a particular time-slot at the end of the day with full-body PPE (N95 mask, goggles, face-shield, body-suit, shoe-cover) for the involved healthcare providers (doctors, nurses, technicians) and adequate barrier precautions for the patient
- The admission of patients suspected of or infected with COVID-19 being admitted in separate isolation facility either within the institute or dedicated COVID hospitals with appropriate safeguards to prevent cross-infection

The outbreak of the contagious COVID-19 pandemic threatens to disrupt healthcare systems globally in terms of capacity and resources. It has brought in certain unprecedented and unique challenges that need collective thinking and brainstorming. However, despite all the difficulties and hardships, it has also enabled new ways of learning and communication, which are likely to persist even in the post-COVID world.

Dr. Munish Gairola
Director – Radiation Oncology

Dr. Swarupa Mitra
Sr. Consultant & Chief of Gastrointestinal and Genitourinary Radiation Oncology

Dr. Parveen Ahlawat
Consultant – Radiation Oncology

GAME CHANGERS IN BREAST CANCER TREATMENT

These are the promising times in metastatic breast cancer research. Many newer treatments for metastatic breast cancer are under study and prognosis is improving. Some of these have entered the clinics while others are in study phase. Here we describe some of the latest drugs available to us in breast cancer now a days.

HER2 Targeted Therapies: About 15-20 percent of breast cancers over express human epidermal receptor 2 receptor (HER2). The over expression of HER2 stimulates the downstream pathways leading to cell growth. Trastuzumab was the only anti HER2 monoclonal antibody available earlier. Lately, pertuzumab has shown encouraging results when added to trastuzumab and hence it is now recommended to use the combination of two drugs along with chemotherapy rather trastuzumab alone. The combination gives sustained and deeper response. Other HER2-targeted antibody drugs, such as margetuximab, are under study.

HER2 Antibody-Drug Conjugates: These are highly potent biological drugs built by attaching a chemotherapy drug to an antibody against HER2 with a linker. The antibody specifically targets HER2 receptor found on breast cancer cells. Once it binds to the cell, it triggers internalization of the antibody, together with the chemotherapy drug. This delivers chemotherapy drug with a very high specificity to the diseased cells, maximizing their efficacy and minimizing systemic exposure. Earlier the only drug available in this class was T- DM 1 which contains anti microtubule inhibitor DM1. Lately more potent drug trastuzumab deruxtecan is now available. It exhibits potent and durable responses even in heavily pretreated HER2 breast cancer population. Other beauty of this drug is to exhibit responses in low Her2 disease the trials for which are underway.

Tyrosine Kinase Inhibitors: Kinases are proteins in cells that normally relay growth signals. Drugs that block kinases are called tyrosine kinase receptor inhibitor (TKI). They inhibit the tyrosine kinase domain of HER2 receptor and inhibit the downstream signaling pathway thereby inhibiting cell proliferation. The only TKI available earlier was lapatinib with fewer response rates. Now we have two more oral TKI neratinib and tucatinib out of which tucatinib needs special mention. Tucatinib has very high systemic responses in heavily pretreated HER2 breast cancer population. Apart from that it also exhibits excellent responses in controlling CNS metastasis which is often problematic and frustrating while treating HER2 breast cancer population.

CDK4/6 Inhibitors: Cyclin-dependent kinase 4 and 6 (CDK4 /6) are enzymes important in cell division. CDK4/6 inhibitors have been designed to inhibit various checkpoints in cell cycle leading to cell cycle arrest and cell death. Abemaciclib, palbociclib and ribociclib are FDA-approved CDK4/6 inhibitors for breast cancer treatment. These have changed the landscape of hormone receptor-positive, metastatic breast cancers. These drugs are used in combination with hormone treatment for the above said indication

Pi3 Kinase Inhibitors: Phosphoinositide 3-kinase inhibitor (PI3K inhibitor) functions by inhibiting phosphoinositide 3-kinase enzyme, which is a part of the PI3K/AKT/mTOR pathway. This is an important signaling pathway for many cellular functions such as growth control, metabolism and translation initiation. These drugs inhibit this pathway to induce tumor suppression.The PIK3CA kinase inhibitor alpelisib is FDA-approved to treat metastatic hormone receptor-positive breast cancers harboring a mutation in the PIK3CA gene. Other similar drug in this class which awaits FDA approval is capivasertib which has shown promising results in combination with fulvestrant in hormone receptor positive and in combination with paclitaxel in triple negative breast cancer harboring mutation in the pathway..

PARP Inhibitors: Poly ADP ribose polymerase (PARP) is an enzyme involved in DNA repair. PARP inhibitors induce synthetic lethality in BRACA1/2 mutant cancer cells. The PARP inhibitors olaparib and talazoparib are FDA-approved for the treatment of HER2-negative metastatic breast cancer in people who have a BRCA1/2 gene mutation.

Trop-2 Antibody-Drug Conjugates: Triple negative breast cancers tend to over express Trop2 protein. Sacituzumab govitecan-hziy is the antibody drug conjugate directed against TROP 2 protein. The active chemotherapy drug in this antibody drug conjugate is SN-38 which is delivered to cancer cell when the antibody attaches to the surface of tumor cell. Recently It has received FDA approved for treating metastatic triple negative breast cancer post multiple lines of treatment.

Immunotherapy: Checkpoint inhibitors are the most widely used type of immunotherapy drugs. These drugs "take the brakes off" the natural factors that limit how the immune system can control tumor cells. The checkpoint inhibitor immunotherapy drug atezolizumab is FDA-approved for the treatment of metastatic triple negative breast cancer that express programmed cell death protein 1 (PD-L1).The other checkpoint inhibitor pembrolizumab is FDA-approved to treat metastatic breast cancers that have a high tumor mutational burden of 10 or more mutations per mega base.

Dr. Manish Sharma
Consultant – Medical Oncology,
RGCIRC, Niti Bagh

Date of Printing: 25th September 2020

Date of Publishing: 30th September 2020

Posted at: Ashok Vihar, Head Post Office, Delhi - 110052
Register with Registrar of Newspaper Under No.68797/98
Postal Department Registration No. DL(N)/004/2018-20
Licensed to Post without Prepayment Under No.: "U"(DN)-162/2020

WEBINAR ON ONCOLOGY WITH IMA AYUS, FARIDABAD

RGCIRC organized a webinar in association with IMAAyus, Faridabad on Friday, 11th September 2020 through Zoom. Dr. Manish Sharma, Consultant – Medical Oncology delivered a lecture on "Approach to a Patient with Cancer" in the said virtual meeting. The webinar was very well appreciated by the gathering.

WEBINAR ON ONCOLOGY WITH IMA FARIDABAD

RGCIRC organized a webinar in association with IMA Faridabad on Saturday, 19th September 2020 through Zoom. Dr. Amitabh Singh, Consultant – Uro Oncology delivered a lecture on "Robotic Surgery in Uro Oncology" and Dr. Vandana Jain, Consultant – Gynae Oncology spoke on "Role of Robotic Surgery in Gynae Oncology" in the said virtual meeting. The webinar was attended by more than 40 delegates.

WORLD PATIENT SAFETY DAY

A Patient Safety Week was observed at Rajiv Gandhi Cancer Institute and Research Center from 15th September to 21st September 2020 to realign the awareness of hospital staff on World Patient Safety Day on 17th September 2020. The theme for this year was **"Health Worker Safety: A Priority for Patient Safety"** and the slogan was **"Safe health workers. Safe patients"**

The patient safety week was observed at our hospital by dedicating various activities related to the six International Patients Safety Goals (IPSG) namely :

- Identify patient correctly,
- Improve effective communication,
- Improve the safety of high alert medications,
- Ensure correct-site, correct procedure, correct-patient surgery,
- Reduce the risk of healthcare associated infections,
- Reduce the risk of patient harm resulting from falls.

A webinar was organized on the World Patient Safety Day,17th September 2020, where Directors and consultants participated by giving presentations on various aspects of patient safety. Opening remarks for the webinar were given by CEO and Medical Director.

Apart from daily webinars, competitions for posters, slogans and poems were also held. Daily mailers were sent for virtual webinars between 12:00 pm to 1:00 pm which were followed by compliance rounds and a daily quiz.

The initiative was appreciated by all consultants and staff members.

Dr. Pinky Yadav
Medical Superintendent

To:

_____

_____

_____

_____

_____

If undelivered please return to:
Rajiv Gandhi Cancer Institute and Research Centre, D-18, Sector - 5, Rohini, Delhi - 110085

Printed and Published by Mr. Pramod Maheshwari on behalf of Indraprastha Cancer Society and Research Centre and printed at R. R. Enterprises, 18 - A, Old Gobind Pura Ext., Street No. 2, Parwana Road, Delhi - 110051, Tel: +91 - 8447494107, Published from Rajiv Gandhi Cancer Institute and Research Centre, D - 18, Sector - 5, Rohini, Delhi - 110085

Editor: Dr. A. K. Dewan