

Experts discuss causes and preventive measures for cancer

India is ranked eighth among 10 major Asia Pacific countries in cancer preparedness, according to a report of the Economist Intelligence Unit released in 2020. World Trade Center Jaipur organized a seminar to discuss the major causes and understand the preventive measures for cancer. The seminar was organized in partnership with HCG Cancer Centre - Jaipur, Mimansa Infotech and JW Media and it was addressed by Dr. Manish Chomal, MD, DNB, (Radiotherapy), Medical Director, HoD and Senior Consultant, Radiation Oncology, HCG Cancer Centre, Jaipur. Dr. Bharat Rajpurohit, Chief Operating Officer, HCG Cancer Centre, Jaipur also shared his views and suggestions on this subject.

In his introductory address, Dr. Chomal explained the main causes and different types of cancer. He informed, “Cancer is caused by certain deviations in genes, which are long strands of tightly packed DNA called chromosomes. It happens to be a genetic disease—that is, it is caused by changes to genes that control the way our cells function, especially how they cultivate and split, genetic changes that lead to uncontrolled cell growth and tumor formation. While some forms of cancers are due to inherited genetic mutations, most cancers are related to environmental, behavioral exposures or lifestyle. Today, tobacco use accounts for 25–30% of cancer deaths. Pollutants, diet and obesity is responsible for 35% and radiation 10% of cancer deaths. To be noted here is that maximum gene mutations occur after birth and aren't inherited. A number of forces that can cause gene mutations could be due to viruses, cancer-causing chemicals (carcinogens), obesity, hormones, chronic inflammation and lack of physical activity. Broadly, there are 19 cancers, Breast Cancer, Cervical Cancer, Oral Cancer, Cancer In the Eyes, Cancer of the Pancreas, Colorectal Cancer, Esophageal Cancer, Kidney Cancer, Laryngeal Cancers, Liver Cancers, Lung Cancers, Ovarian Cancers, Prostate Cancer, Skin Cancers, Stomach Cancer, Testicular Cancer, Thyroid Cancers and Uterine Cancer.”

Dr. Chomal further highlighted the symptoms of Cancer and explained the tests required, “Persistent sore especially if it is in the mouth, on the lip or on tongue, lumps or masses which appear where none were present previously, insistent indigestion, change in intestine habits, abnormal bleeding from any opening of the body, coughing up or vomiting blood, passing blood in the urine and rectal bleeding etc. Uterus and breast cancer are most common in women, while in former case first sign of cancer is often a blood-discharge occurring between menstrual periods or after menopause. Symptoms of breast cancer include a lump in the breast, blood discharge and changes in the shape of the breasts. Also, unexplained loss of weight may be due to many things but may also be due to hidden cancer. Physical examination, laboratory tests, such as urine and blood tests, imaging tests that allow your doctor to examine your bones and internal organs, for example a positron emission tomography (PET) scan, computerized tomography (CT) scan, bone scan, magnetic resonance imaging (MRI), ultrasound and X-ray are required.”

Dr. Rajpurohit explained the contribution of private hospitals in cancer treatments. He mentioned, “Speed of conducting tests, quick purchase of new devices and modern technology are some benefits in private hospitals. But given this fact, there is a rising need for the private sector to partner with the government, to extend modern cancer treatment facilities in rural areas. Through this, the cost of certain tests will eventually decline.”

Further, explaining the services available in HCG Cancer Centre, Dr. Rajpurohit said, “Today, HCG Cancer Centre provides comprehensive cancer care with management of cancers as a multi-specialty

concerted approach including the most advance Radiation Oncology Centre, 10 Bed dedicated to Bone Marrow Transplant Unit with stringent & infection control practices, dedicated intensive care unit along with highly equipped accident and trauma care unit. Further, HCG Offers Medical, Surgical and Radiation Oncology Services as Adjuvant, Neoadjuvant, Palliative and Targeted Chemotherapy, Radical Head and Neck Surgery, Microvascular Surgery with Reconstruction, Laser Surgery, Laparoscopic Cancer Surgery, in-house CT scan and ultra-modern day-care unit.”

Continuing the discussion, Dr. Chomal spoke on cancer treatment methods, modern techniques in cancer treatment and screening tests. He explained “There are many types of cancer treatments. The types of treatment one receives depends on the type of cancer one has and its level of advancement. Chemotherapy, Hormone Therapy, Biomarker Testing for Cancer Treatment, Hyperthermia, Immunotherapy, Photodynamic Therapy, Stem Cell Transplant, Targeted Therapy etc. are a few treatments. It is expected that modified vaccines, cell treatment, gene expurgation and microbiome treatments are a few technologies that will change the way cancer is treated. Taking an example here, what makes cancer tough to fight is that its cells can escape your immune system, body doesn’t see them as intimidations, or it just can’t work hard to fight them. But through some immunotherapy drugs marking may be done so that cells are relatively simple to find. Not only this, they may make our defenses stronger. Cancer screening intends to detect cancer even before symptoms appear. This may involve blood tests, urine tests, DNA tests and medical imaging. The benefits of screening in terms of cancer prevention, early detection and subsequent treatment are definitely to be considered. Alpha-fetoprotein blood test, Breast MRI, CA-125 test, PSA test, Cervical cancer screening, Lung cancer screening and Virtual colonoscopy are a few to name.”

Dr. Chomal recommended some preventive measures to avoid cancer and some of them are as follows: avoid tobacco, check alcohol consumption, control unhealthy diets, maintaining a balanced nutrition count, control weight gain and fight obesity, avoid the spread of pollution and excessive exposure to ultraviolet radiations.

In his closing remarks, Dr. Rajpurohit emphasised, “Never give up, work on improving your lifestyle, adopt good habits and always remember, that we cannot direct the wind, but we can adjust the sails”.

Mr. Navneet Agarwal, Assistant Director, World Trade Center Jaipur proposed the vote of thanks.

The seminar was held on June 25, 2022 at the Seminar room - HCG Cancer Centre, Mansarovar, Jaipur.



(From left to right): Mr. Navneet Agarwal interviewing Dr. Manish Chomal, MD, DNB, (Radiotherapy), Medical Director, HoD and Senior Consultant, Radiation Oncology, HCG Cancer Centre, Jaipur.