Goa Needs Modern Radiation Oncology Facilities Now

By Dr R G Wiseman Pinto

Goa records nearly 1,700 new cancer cases every year and the burden continues to rise. Modern cancer treatment today depends on four major pillars: surgery, chemotherapy, radiotherapy and immunotherapy. Among these, radiation oncology has witnessed remarkable advances across the world. Unfortunately, Goa still lags behind in providing modern radiation therapy facilities to its patients.

Radiation therapy works by delivering high-energy radiation to destroy the DNA of cancer cells. It is used in the treatment of several cancers including breast cancer, prostate cancer, lung cancer, head and neck cancers, brain tumours, gastrointestinal cancers, pancreatic cancers, lymphomas, sarcomas, skin cancers, gynaecological cancers and endocrine cancers. Radiation is also used for certain benign tumours like acoustic neuromas, meningiomas and pituitary adenomas.

Goa Medical College still depends on the old cobalt therapy machine that was introduced nearly 30 years ago. No major replacement or upgrading of machines has taken place over the decades. This outdated technology causes more side effects and does not provide the precision now available with modern radiotherapy systems.

Across India and the world, newer technologies are now routinely used. These include Linear Accelerators for external beam radiation, brachytherapy for internal radiation, image-guided radiation therapy, stereotactic radiosurgery using Gamma Knife and even Proton Therapy. These advanced techniques allow more accurate targeting of tumours while reducing damage to surrounding healthy tissues.

The Department of Radiotherapy at Goa Medical College was started around three decades ago by Dr Mahesh Sardesai after his training at Tata Memorial Hospital in Mumbai. However, the same cobalt therapy system continues even today despite the increasing number of cancer patients. Goa Medical College reportedly receives around 30 new cancer cases daily. The need for modernisation has become urgent.

Many Goan cancer patients are forced to travel outside the state for advanced radiotherapy treatment. They seek treatment at centres in Manipal, Belgaum, Mumbai, Bengaluru and Chennai. This creates emotional, physical and financial hardship for patients and families already struggling with cancer. Radiation treatment usually extends over six weeks with sessions lasting between 10 and 30 minutes, five days a week. Travelling long distances for such prolonged treatment becomes exhausting for patients.

Radiation oncology is highly specialised and requires a multidisciplinary team consisting of radiation oncologists, physicists, medical oncologists, surgical oncologists and trained nurses. The radiation dose must be carefully calculated and the precise area for treatment must be marked accurately.

Radiation therapy is not only curative but also palliative. It is used to relieve pain, shrink tumours before surgery and reduce pressure on vital organs. It is also used before bone marrow transplantation in conditions like acute lymphoblastic leukaemia in the form of total body irradiation.

Although the procedure itself is painless, side effects can occur. These include skin irritation, fatigue, diarrhoea, dry mouth, sore throat, hair loss, fibrosis, infertility and in some cases even secondary cancers.

It is ironic that the first Head of the Department of Radiotherapy at Tata Memorial Hospital was the late Dr J Pinto, a bachelor from North Goa. After retirement, he regularly attended continuing medical education programmes at Goa Medical College.

The author had initiated a Visiting Faculty Programme at Goa Medical College in the early 2000s. Under this programme, Dr Kaity Dinshaw, the renowned Professor and Head of Radiation Oncology at Tata Memorial Hospital and later its only woman Director, was invited to teach students and faculty at GMC. Her story was extraordinary. After obtaining her FRCR degree in Radiotherapy from London in 1971, she arrived in Bombay during the Bangladesh war when flights were disrupted. Unable to return to Calcutta, she was guided towards Tata Memorial Hospital where she was offered a position. She later rose to become Director of the institution, strengthened discipline in the hospital and improved salaries for medical staff.

Today, Manipal Hospitals Goa has a Linear Accelerator facility and serves many patients requiring advanced radiation treatment. However, Goa Medical College, the state's premier government institution, urgently requires similar modern equipment.

Proton therapy, though highly advanced, is extremely expensive and currently available only at limited centres in India including Tata Memorial Hospital Mumbai and Apollo Chennai. Such a facility may not presently be practical for Goa due to its enormous infrastructure and maintenance costs.

What Goa urgently requires is at least a modern Linear Accelerator facility at Goa Medical College. Goa and Goans deserve better cancer care facilities. Cancer patients should not be compelled to leave the state in search of modern radiation treatment when timely care can significantly improve survival and quality of life.

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