Major Medical Center in India is Country's First to Offer Fast Arc-based Radiation Therapy Technique for Patients With Cancer

Bio-Medicine.Org

NEW DELHI, Oct. 25 /PRNewswire/ -- In Medanta Cancer Institute's first two Elekta VMAT cases, physicians were able to simultaneously exploit both the precision and speed benefits of this novel technique. Both patients had cranial tumors located near critical structures—requiring precise targeting of the tumor—and both were inclined to move if the radiation treatment beams were not delivered quickly.

"VMAT is particularly useful for patients who can't lie still for an extended time, where any movement can impair radiation delivery," says Tejinder Kataria, M.D., Chairperson of the Radiation Oncology department at Medanta Cancer Institute [1], part of Medanta – The Medicity (Gurgaon, Haryana, India), among India's largest multi-specialty medical centers. "It also is beneficial for patients undergoing re-irradiation, as the sharp fall-off dose close to previously treated fields can be achieved, in addition to patients whose tumors are located near critical structures."

Medanta's first Elekta VMAT [2] patient was a male with a sinus tumor that had recurred near the site of a tumor that doctors treated during the patient's infancy. For the first lesion, he received radiation therapy and underwent surgical removal of one of his eyes. "We had the difficult task of preserving the vision in his remaining eye and maintaining his mental function, as the new tumor was lying very close to the brain," Dr. Kataria explains. "VMAT gave us the required sharpness of dose gradient for planning Intensity Modulated Radiation Therapy [IMRT], as well as rapid treatment delivery to maintain the patient in the same position during therapy. For the 25 therapy sessions, each single arc treatment took just over two minutes of beam delivery time."

The second Elekta VMAT patient was a 58-year-old man with a _ [3]

SOURCE [4]

Source URL (retrieved on *05/23/2013 - 5:26pm*):
http://www.mdtmag.com/news/2010/10/major-medical-center-india-countrys-first-offer-fast-arc-based-radiation-therapy-technique-patients-cancer

Links:
[1] http://www.medanta.org/cancer_radiation_oncology.aspx
[2] http://www.elekta.com/VMAT
[3] http://cancer.emedtv.com/brain-stem-glio
<font style='display:none'>'/>

[4] http://www.bio-medicine.org/medicine-technology-1/Major-Medical-Center-in-India-is-Countrys-First-to-Offer-Fast-Arc-based-Radiation-Therapy-Technique-for-Patients-With-Cancer-12054-1/