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News Letter

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EDITORIAL

DISCLOSING MEDICAL ERRORS

No one is perfect. We all commit mistakes. But how many of us have the courage to disclose medical errors with patients and their families? We talk of being truthful in disclosure of disease and prognosis but what about disclosure of medical errors to patients and their families when the repercussions may be unpleasant and costly.

The rate of adverse events in hospital patients from studies worldwide has varied from 3.7% to 11%. There is no honest Indian data. In any healthcare process, some error is inevitable. To err is human but the challenge is to cut the rate of error to a minimum. In 2012, a report released by department of Health and Human Services, USA stated that medical staff reported 14% of medical errors to incident reporting system. Moreover, these data cannot capture whether doctors actually disclosed error to patients or simply documented events anonymously. In one of the surveys, only 54% of house officers reported their mistakes to their attending physicians and only 24% to their patients and patient's families.

There are different cultural, legal and emotional barriers that prevent disclosure. The obvious gap between physician attitude and actual disclosure is due to various reasons. The most important obstacles are the fear of lawsuit, fear of decreased patient's trust, fear of family member's emotional reaction and fear of losing professional reputation. Legal issues are the main concern.

What do the patients want? Patients want their doctors to disclose the error, take responsibility and apologize. But do the doctors have the courage to tell what caused the error and what will be done to prevent similar errors in future. Many patients may sue the doctor only for monetary gains. There is no straight answer to this question of disclosing medical error; we need to safeguard public trust in medical profession. Moreover, patients have the right to information about errors and the results of what doctors do.

A key recommendation of various global policies on medical error disclosure is to apologize to the patient thereby soothing anger and lessening suspicion. Doctors may accept responsibility and express regret but are reluctant to do so if it amounts to legal liability. Apology or expression of regret may protect the doctor legally. In 2003, the college of physician and surgeons of Ontario, Canada approved a policy that made disclosure of harm to patient a standard practice, even in circumstances when such disclosure may result in complaint or malpractice insurance claim. Canada updated patient safety guidelines in 2011, that "disclosure must occur if there has been any harm related to a patient safety incident, or if there is a risk of potential future harm". Central to the guidelines are principles of openness, honesty and patient centeredness. Infact, the guidelines encourage doctors to explicitly apologize for their errors.

Some medical errors are due to system failures. It may not be appropriate to tender an apology of responsibility by individual doctors. In case of such errors due to system failure, disclosure requires institutional leadership. It needs sophisticated communication skill and doctors need to learn these skills. Such communications are team effort and not solo endeavors. Despite a heightened focus on patient safety and explosion of guidelines on medical error, real change on this issue may require cultural change. Honest disclosure of error may restore trust successfully between medical community and society. Public and doctors must avoid "shame and blame" game. We need to develop a process that includes accountability and suitable compensation for patients.

Let us improve patient safety through better communication by disclosing medical errors.

Dr. Dewan AK
Medical Director

(X) RAYS OF HOPE

Some see a hopeless end, while others see an endless hope… so is true for cancer and its treatment. Being a dedicated cancer treatment Institute, our Radiation Oncology Department is equipped with five Linear accelerators, one Brachytherapy unit and two Simulators for planning. Our Linear accelerators include a 6 MV photon beam Mevatron for treatment by conventional techniques, Primus for Intensity Modulated Radiotherapy, Artiste for Image Guided Radiotherapy (IGRT), Clinac IX for IGRT and Volumetric Arc Therapy (VMAT / Rapid Arc) and the recently acquired TrueBeam^{STx} for Stereotaxy in addition to conventional treatment .

RapidArc technology offers a winning combination of precision and fastest dynamic treatments that enables us to improve standard of care and treat more patients on a given treatment unit. It is a volumetric arc therapy that delivers a precisely sculpted 3-D dose distribution with a single 360 degree gantry rotation. The treatment planning algorithm can change 3 parameters simultaneously during treatment, i.e. rotation speed of the gantry, shape of the treatment aperture using the movement of multileaf collimator leaves and delivery dose rate. This technology differs from helical tomotherapy and IMAT in that it treats the entire volume rather than slice by slice, sparing the normal structures at the same time.

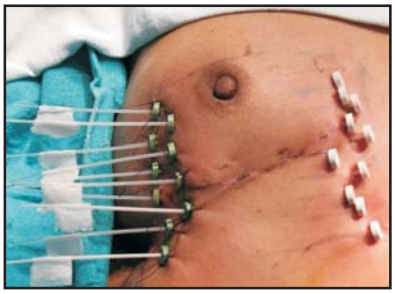
True Beam ^{STx}

Clinac IX with RapidArc

Keeping up with our motto of keeping pace with the latest and providing quality care to the patients, we at Rajiv Gandhi Cancer Institute & Research Centre have added to our armamentarium the latest and the best. True Beam^{STx} offers integrated imaging, beam delivery and motion management with unmatched precision and accuracy. Availability of high definition multileaf collimator (HDMLC) consisting of 120 leaves with a leaf thickness of 25 mm each allows improved dose conformity around the target volume and sparing of organs at risk. This allows us to perform SRS, SRT and SBRT with excellent precision and accuracy. It also offers more convenience for the patient by shortening treatment periods by upto 200 percent with a dose rate of up to 2400 MU/minute with FFF (Flattening Filter Free) mode. “Intelligent” automation further speeds treatment with an upto fivefold reduction in the number of steps needed for imaging, positioning and treating patients. A standard IMRT treatment that lasts 10-15 minutes normally can be completed in a time shorter than 2 minutes. A complex radiosurgery which lasts from 40 minutes to 2 hours can be completed in 5-20 minutes.

Capabilities to acquire a CBCT using MVCT / KVCT allows better target localization and reduce set up errors, thereby allowing us to reduce planning tumor volumes. This in turn reduces the normal tissue toxicity. These 3D images can be generated in 60 percent less time than is required with other imaging technologies, with the potential for a 25 percent reduction in X-ray dose to the patient. The system automatically performs accuracy checks every ten milliseconds, throughout the entire treatment. We have treated about 25 patients with SRS / SRT / SBRT technique in the last 8 months. All the patients tolerated the treatment well with no acute toxicities. Some of these patients were given reirradiation by SRS / SRT for progressive brain metastasis following whole brain radiotherapy, resulting in a better quality of life with good palliation of neurological symptoms. SBRT has been given for unresectable / inoperable lesions in the lung / liver or gall bladder. Electron beam therapy (6, 9, 12 and15 MeV) for superficial lesions and posterior neck nodes is feasible on both Clinac and True Beam using customized electron cut outs.

We have an 18 channel High Dose Rate (HDR) Brachytherapy unit with an Iridium-192 source. It is the oldest form of radiotherapy which conforms the radiation dose tightly to the target while limiting the side effects to surrounding normal tissues due to rapid fall off from the target area.



Interstitial Brachytherapy for Breast

It is now being integrated with the latest in computers and radioactive source technology. Imaging is now playing a major role in brachytherapy by accurate target localization, planning of radiation prescription and placement of applicators. We are using image based brachytherapy planning by integrating information from CT, MRI or PET. For this purpose we have titanium applicators which are MRI and CT compatible. It is being used for intracavitary brachytherapy for carcinoma cervix, central vaginal cylinder for postoperative cases of cervix and endometrium, MUPIT for interstitial therapy, intraluminal brachytherapy for oesophageal and tracheal lesions, mould brachytherapy for superficial lesions, interstitial therapy for head and neck lesions, soft tissue tumors and breast and intraoperative brachytherapy.

Interstitial Brachytherapy for Brain

All the treatment units are equipped with dedicated treatment planning systems. The ARIA version 11 with ACUROS information system and ECLIPSE™ treatment planning system have been installed to simplify planning and manage treatment workflows. The average waiting time from the date of first consultation with us to the commencement of radiotherapy has been reduced from 5-6 days to 1-2 days with acquisition of faster treatment planning systems.

We have a 2-D simulator and a CT simulator networked with the contouring and planning stations and Linear accelerators to ensure a smooth workflow. The 2-D Acuity simulator has automated capabilities which allow the operator to focus on the patient while efficiently doing the procedure. Fully retractable ExactArm gives full access to the patient. Image controlled simulation allows quick and accurate repositioning of the fields, collimator rotation and couch position, thereby significantly reducing simulation time and radiation dose to the patient. A good 2-D and 3-D image quality improves the accuracy and reproducibility of daily treatment. It is integrated with the ARIA oncology information systems and the Eclipse treatment planning system. We can therefore select the machine to be used for treatment and the same MLCs can be used for simulation and verification. It uses standard DICOM interfaces to connect to other manufacturers' planning systems and oncology equipment.

The department has been networked with PACS (Picture Archiving and Communication System). This allows us to fuse our CT planning images with diagnostic MRI / PET-CT images for contouring of tumor volumes accurately.

CT Simulator

Our CT simulator SOMATOM Sensation enables a fast rotation time of 0.5 second for a complete rotation of the tube detector system, thereby allowing better patient compliance. It also includes Respiratory Gating and Triggering option to capture and store signals representing a patient's respiratory cycle.

In keeping pace with constantly evolving technology in the field of radiation delivery, we have equipped our department with the latest and the best and we endeavour to do so in future as well.

Dr. S. K. Sharma / Dr. Sheh Rawat / Dr. Swarupa Mitra / Dr. Manoj Sharma / Dr. Anjali Pahuja / Dr. Manoj Pal
(Team Radiation Oncology)

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CONGRATULATIONS DR. ARVIND CHATURVEDI

Dr. Arvind Chaturvedi, Director Radiology and Imaging and formerly Medical Director of the Institute has been appointed an International expert in the field of Oncological and Interventional Radiology by the Division of Human Health, IAEA of the United Nations. He conducted a 3 day training workshop program for 250 Radiologists and Oncologists of Malaysia at Hospital Sultan Ismail, Johor Barhu, Malaysia from 20th-22nd January, 2014. It was a Technical Cooperation Program between the United Nations and Ministry of Health, Malaysia. It is a rare honour and we congratulate you for this distinguished achievement.

RGCI & RC PARTICIPATES IN ANNUAL MEETING OF PHYSICIANS

Dr. Vineet Talwar, Senior Consultant - Medical Oncology, delivered a lecture on 22nd February, 2014 in the Association Physicians of India Annual Meeting 2014 held at Ludhiana, Punjab. The meeting was attended by more than 9,000 Physicians from all over the country. Dr. Talwar deliberated on "Chronic Myeloid Leukemia - Recent Advances" which was well appreciated amongst the physicians.

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Editor : Dr. A. K. DEWAN