

UCI Medical Center

University of California, Irvine

A Passion for Care. The Power to Cure.

RADIATION ONCOLOGY: INCREASING ACCESS TO COMPREHENSIVE RADIATION THERAPY TREATMENT PLANNING

BACKGROUND

During fiscal year 2003-2004, a total of 114 treatment planning CT scans were performed resulting in the performance of 102 virtual sim/3D treatment plans. The goals identified by Radiation Oncology were to increase the number of patients receiving radiation therapy planning computed tomography (CT) scans and virtual stimulation 3D radiation therapy treatment planning. By utilizing CT scans for 3 dimensional treatment planning, the target (tumor) can be better delineated from normal tissue. This allows us to better protect normal tissue, while providing a tumoricidal dose to the target.

INTERVENTIONS

A multi-disciplinary team composed of staff, physicists and physicians in Radiation Oncology was formed to develop interventions. Two changes were implemented in the fall of 2004 to achieve the goals identified above:

- The authorization form was redesigned so that every patient was pre-approved for a treatment planning CT.
- Scheduling of all planning procedures was streamlined to ensure faster throughput of our patients.

RESULTS

In fiscal year 2004-2005, a total of 191 treatment planning CT scans were performed resulting in the performance of 159 virtual sim/3D treatment plans. This represents 67% more planning CT scans and 56% more virtual sim/3D treatment plans than occurred in fiscal year 2003-2004. The Center benefited from this additional service but, more importantly, our patients received the benefits of sophisticated 3D treatment planning.

DISCUSSION

Future goals include the installation and acceptance of the Varian Trilogy linear accelerator. This piece of equipment will provide Radiation Oncology with state-of-the-art treatment capabilities. Another system to be installed and accepted will be the Varian

HDR brachytherapy system. This equipment will allow the department to modernize the brachytherapy practice and to offer new procedures (such as mammosite).

For more information, please contact:

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