

AbstractID: 1692 Title: A Simple (AP/PA) Technique Using Image Guidance and a Floating Custom Block to Treat a Morbidly Obese Patient.

Morbid obesity may be a contraindication to a patient's required course of external beam therapy when the weight of the patient exceeds the weight limits of the patient support equipment, typically 400 pounds. We report on a simple technique using image guidance and a "floating" customized block in conjunction with a special OR table to treat the pelvis of a patient weighing 535 pounds. Safety considerations and patient girth necessitated extended treatment distance at 115 cm SSD using AP/PA ports, with the patient supine and prone respectively. 4MV x-rays were used for simulation and 15 MV x-rays were used for treatment. Because the table could not be moved easily (in/out/left/right) with the patient on it and because skin marks were unreliable on the fleshy organ, daily port filming was employed to delineate the target based on bony anatomy. Large field port films were used to identify the general target location and they enabled guidance for placing the floating block with large margins on the acrylic accessory tray in the gantry. Primary jaws were then closed so the light field encompassed the margins of the custom block, which by its placement defined a *pseudo* central axis of the beam. Port films confirmed daily block placement. Monitor unit tracking was required because of the daily filming and dosimetric constraints were relaxed by a few percent in order to produce a practical course of therapy for the patient. Caveats, patient and staff safety issues, and dosimetric concerns are identified and discussed.