

AbstractID: 1329 Title: Surface doses for IMRT treatment only and IMRT plus HDR Boost for Head and Neck Cancer

At our institution, head and neck cancer patients are treated using IMRT alone or IMRT plus HDR boost. IMRT treatments for the head and neck cancers are becoming routine clinical practice since IMRT presents superior sparing of critical normal organs and highly conformal dose distribution. The surface doses are generally higher because of the use of thermal plastic masks for patient immobilization and positional accuracy. Because of the multiple fields being used in IMRT, there is increased in surface doses in the range of 30%-60%. We have performed measurements of surface doses for two classes of treatments, IMRT and IMRT plus interstitial implant boost. The surface doses were measured for 20 patients in clinical routine treatments. The results indicated that there is about 70% of surface dose reduction for those cases of IMRT plus HDR boost.