

Conservative treatment of the carcinoma of the anal canal

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Purpose: Radiotherapy is a standard treatment in the conservative management of anal cancer. Our experience with 65 patients was analyzed retrospectively to evaluate local control, late morbidity related to stage and treatment methods.

Materials and methods: From January 1983 to December 1995, 65 consecutive patients were treated by external beam radiation therapy (EBRT) with (n = 31/47.7%) or without chemotherapy (n = 34/52.3 %). An additional boost to the primary tumor region was delivered to 49 patients (75.3%): 29 of these patients (44.6%) received a single interstitial HDR implant (median dose 6.48 Gy), 20 of them (30.8%) received an electron boost. Sixteen patients did not receive any boost. The interstitial HDR brachytherapy boost was delivered by a special template to ensure fixed geometry of the implanted needles. The needle implant was documented by CT imaging, so the offset and the length to be irradiated were determined. The female to male ratio was 55 : 10, median age 69 years. Tumor staging according to UICC: T1: 38.5%; T²: 29.2%; T³: 13.8%; T4: 18.5; positive lymphnodes: 7.7%

Results: Overall survival rate (OS) was 81% at 5 years and 72% at 10 years, disease specific survival (DSS) was 86.1% at 5 years and 10 years. Local control rates (LC) were 83.6% at 5 years and at 10 years. Mean follow up of all survivors was 50 months. Simultaneous chemotherapy showed a significant improvement of LC, DSS and OS in patients with T3 and T4 tumors.

Conclusion: We confirm that radiotherapy is a standard treatment for patients with cancer of the anal canal. Treatment regimes should be individualized in relation to local tumor stage. Limited tumor lesions can be controlled by radiation alone. Boosting the primary tumor lesion by single HDR Iridium implantation did not show any increase in acute or late toxicity and is therefore a safe procedure.

Key words: rectal neoplasms-radiotherapy; chemotherapy; survival rate; local control rate
