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ADJUVANT RADIOTHERAPY HAS NO IMPACT ON DRY RATE AND SURGICAL REVISION RATE AFTER ARTIFICIAL URINARY SPHINCTER IMPLANTATION IN MALE PATIENTS

Hypothesis / aims of study

Artificial urinary sphincter (AUS) implantation has a high success rate in the treatment of post prostatectomy incontinence. Typically, 30–40% of men receiving AUS after RP, have also undergone adjuvant radiotherapy (RT). In literature some series define RT as a risk factors and others as irrelevant. The aim of our study was to investigate in a large multi institutional database whether adjuvant RT had a significant impact on dry rate (DR) and surgical revision (SR) rate outcomes after AUS placement in this group of patients.

Study design, materials and methods

Our Multi-institutional study was conducted on 916 men, implanted with AUS for SUI after RP, between 1993 and 2012 in 15 European and 1 American reference centers. The outcomes of patients who did or did not undergo adjuvant RT (RT vs controls) were compared; data on DR and SR rate were collected and compared. Chi-square and Wilcoxon rank tests were used to compare the outcomes between groups.

Results

Overall 266/916 (29%) patients underwent adjuvant RT. Mean follow up period was 30 months (median 20.4; range 0.5-269). No statistically significant differences were found between the 2 groups in terms of age, diabetes mellitus, anticoagulant intake, smoking, previous surgery and follow up period. The comparative analysis showed no statistically significant differences in DR or SR in RT vs controls group (p=0.37 vs 0.40 respectively).

Interpretation of results

Literature is still ambiguous on the effect of RT on AUS dry rate and surgical revision rate; on the other hand, the majority of studies underlines that RT increases the risk of re-intervention after AUS implantation. To our knowledge this is the largest cohort assessing the impact of RT on AUS outcomes.

Concluding message

We could not demonstrate a significant impact of adjuvant RT on DR nor on SR rate.

Disclosures

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