

AbstractID: 5097 Title: FIRST, the first choice in the management of localised prostate cancer?

Purpose: To evaluate the clinical use of the FIRST system for the definitive treatment of localised prostate cancer.

Method and Materials: From January 2003 through December 2005 a total of 634 patients were treated, either with the FIRST system (278) or with RAPID Strands (356). Patient characteristics were identical for both groups, but strands were more often used after TURP (19 vs. 3). We looked at implant data and side effects, also in relation to the use of loose spacers in the FIRST group.

Results: Prostate volumes were similar (34 and 35.5 cc) as well as the number of seeds (mean 74 and 70). In total 20,526 Selectseeds and 24,866 stranded seeds were used. The number of loose spacers in the FIRST system was approximately the same as the number of active seeds. The number of seeds that disappeared from the body was the same (128 and 130), but migration within the body was higher with FIRST (48 vs. 0). Migration of spacers within the body cannot be detected. Toxicity according to the common toxicity criteria was similar for both techniques. Acute retention was found in 24 FIRST patients (8.6%) and 27 strand patients (7.5%). Infection was found in 3 patients in both groups. Erectile dysfunction was found in 32% after FIRST and 28% after strands, but not assessed in more than 50% of all patients. None of the patients died of prostate cancer; intercurrent death was encountered in 4 FIRST and 6 strand patients.

Conclusion: We cannot favour one of the techniques. There is a higher incidence of migration with loose seeds as used in the FIRST system, but no detrimental effects were observed. The use of polylactide loose spacers in FIRST did not result in detectable adverse effects; neither did the polyglactin wires in the stranded patients.