

## **EARLY RESULTS OF INTRAURETHRAL MACROPLASTIQUE FOR POST RADICAL PROSTATECTOMY STRESS INCONTINENCE**

### **Aims of Study**

Since there only a few reports in the literature [1,2], a prospective clinical trial was undertaken to evaluate the safety and efficacy of a urethral bulking agent Macroplastique® in the treatment of mild to moderate stress urinary incontinence (SUI) after radical prostatectomy (RP). Primary endpoint was change incontinence grade and secondary was change in urine loss.

### **Methods**

Males with SUI that was not improving at least 1 year after RP were selected. Baseline evaluation included clinical assessment, incontinence grade (Stamey), Quality of Life (QoL), urodynamics, and 2-hour pad weights. Injection of Macroplastique® was done transurethrally under general or regional anaesthesia as an outpatient. Follow-up evaluation with incontinence grade, QoL, pad weights was scheduled at intervals after injection. Up to 2 retreatments were undertaken after an interval of 3 months. A pad weight of 2 gm or less was classified as cure, and pad weights of more than 2 gm were classified as improved. Overall success was defined as a decrease in incontinence grade and pad weight reduction of 50% or more.

### **Results**

Of 18 men screened, 15 with a mean age of 63.9 years (range 51-74) were treated. All of the patients except 1, who had 1 treatment, have undergone a total of 3 treatments. The minimum follow-up of the group is 6 months after the last injection (range 6 to 21). Overall success has been seen in 10 patients (67%). Two patients (13%) have been cured at 12 and 21 months after last injection. The 8 improved patients (53%) had a mean pad weight of 41 gm pre-treatment and 20 gm post-treatment, a reduction of 51% ( $P>0.05$ ). These patients decreased their pad requirement from 3 to 1.8 pads per day ( $P<0.5$ ). Of the 5 patients who failed (33%), 1 experienced an increase in pad requirement. Adverse events were seen in 3 patients who needed 5 days of catheterization for retention. No other significant morbidity was seen. Four patients had undergone post RP radiation and of these 1 failed and 3 improved. The failed irradiated patient required transurethral removal of the implant after erosion into the urethra.

### **Conclusions**

Intraurethral Macroplastique® is a safe and reasonably effective treatment for post RP SUI. Patient acceptance and willingness to complete treatment is high and morbidity is low.

### **References**

1. Colombo T, Augustin H, Breinl E, Schips L, Hubner G: The use of polydimethylsiloxane in the treatment of incontinence after radical prostatectomy. *Brit J Urol* 1997; 80:923-926
2. Bugel H, Pfister C, Sibert L, Cappele O, Khalaf A, Grise P. Intraurethral Macroplastic injections in the treatment of urinary incontinence after prostatic surgery. *Progres en Urologie* 1999; 9:1068-1076.