

## **EFFICACY OF PERIURETHRAL SILICONE MICROIMPLANTS (MACROPLASTIQUE) IN THE TREATMENT OF URINARY STRESS INCONTINENCE AND STRESS INCONTINENCE WITH DETRUSOR OVERACTIVITY – A QUESTIONNAIRE STUDY.**

### **Aims of Study**

The aim of the study was to assess the efficacy of the periurethral injection of silicone microimplants (Macroplastique) for the treatment of pure genuine stress incontinence (GSI), stress incontinence with Detrusor instability (DI) and stress incontinence with voiding dysfunction. It also looked at the influence of factors like HRT, age and previous surgery on the success of the treatment.

### **Methods**

80 women, who had treatment with Macroplastique, were included in the study. A questionnaire was sent out to them with a pre-paid envelope which was designed to assess the efficacy of treatment and evolved from a similar questionnaire completed before commencing surgery. The postal questionnaire included two additional questions with visual analogue scoring and they were to assess the quality of life and degree of leakage.

Success was measured by a visual analogue score (1 to 10) for both quality of life and degree of leakage. Success for quality of life was graded as excellent (score > 7.5), good (score 5 to 7.5), satisfactory (score < 5) or none (score < 1). Conversely, for degree of leakage, success was graded as excellent (score < 1), good (score < 5), poor (score 5 to 7.5) or none (score > 7.5). All of them had the follow up between 9 to 14 (mean 11 months). Data was further analysed to assess the influence of age, HRT, type of urinary incontinence and previous surgery on the success rate.

### **Results**

Out of the 80 women, 74 women responded to the second questionnaire (response of 92%). 66 patients (89%) said the quality of life had improved. This was as follows with percentage in brackets - excellent in 29 (39%), good in 24(32%) and satisfactory in 13(18%). Only 6 (11%) reported no improvement. The score for degree of leakage corresponded with the quality of life.

42women (56.75%) had pure GSI, 27 women (36.48%) had stress incontinence with DI, and 5 women (6.75%) had stress incontinence with voiding dysfunction. A high success rate of 76% was obtained in the pure GSI group but a reasonable success of 59% was obtained in the mixed (GSI with mild DI) group and a 100% success rate in the small category with associated voiding dysfunction.

The success rates were higher in all categories when HRT was used. It increased to 80% (from 76%) in women with pure GSI and to 61% (from 59%) in GSI with DI group.

The success rates were also found to be higher in the older age group (60 years or more) for all the categories of incontinence. In the women with GSI, this was 80% (>60yrs) versus 67% (<60yrs). In women with GSI + DI, success was 73% (>60yrs) versus 50% (<60 yrs). In women with GSI + voiding dysfunction, success was the same.

Interestingly, 44 women (59%) preferred this treatment to other surgical options. In 22 (30%), it was both clinical and patient choice, and in 8 (11%) it was a preferred clinical choice in view of high-risk medical problems.

### **Conclusions**

The majority of women preferred this treatment option to other surgical options. It was a preferred choice in women with previous surgery and medical problems. Success rates were best in women with pure GSI, but reasonable in women with GSI + mild DI. Hormone replacement therapy (local / systemic) improved the success in all categories of urinary incontinence. In women with age of more than 60 years, the success rate was found to be higher.