

Zafirakis, H.G., Nathan, S., & Shah, J. (2002). Long-term efficacy of submucosal urethral injection for genuine stress incontinence in women. AUA abstract, Florida, USA.

Introduction and Objectives: Submucosal injection of silicone microimplants is now an established treatment of GSI when it is injected endoscopically to the proximal urethra of patients with GSI, producing a bulking effect. The aim of this study was to assess the long-term efficacy of periurethral submucosal injection of silicone microimplants in women with GSI.

Methods: A retrospective study of 66 female patients injected with Macroplastique® was performed. Patients were classified as Type I, IIA or III according to Blaivas by video-cystometry (VCMG). Patients were followed-up at three and six months, then yearly, up to a maximum of eight years. Patients outcomes were assessed objectively, using pad tests and clinical examination or post-injection VCMG, and subjectively, by means of the visual analogue graded scale in accordance with the recommendations of the International Continence Society.

Results: Success rates at 3 months were 53.3% for Type I GSI, 28.6% for Type IIA GSI and 77.3% for Type III GSI. 5-year success rates were 83.3%, 33.3% and 80.0%, for Types I, IIA and III GSI respectively, with the overall success rate at five years being 65.5%. Results were poorest in patients with Type IIA GSI. These patients represent GSI with the greatest degree of bladder neck (BN) hypermobility. Re-injection of a sub-group of patients from the overall patient population was associated with a 4-year success rate of 70%. 77.5% of patients questioned were satisfied with the result following injection treatment and 58.1% would recommend injection therapy to a friend or patient.

Conclusions: Silicone injection treatment offers good long-term results for the treatment of GSI in women, especially in patients with no or minimal bladder neck descent and in those with intrinsic sphincter deficiency. Further studies need to be performed on its efficacy in patients with Type IIA GSI.