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PERIURETHRAL INJECTIONS OF DEXTRANOMER / HYALURONIC ACID COPOLYMER UNDER LOCAL ANAESTHESIA FOR THE TREATMENT OF GENUINE STRESS INCONTINENCE.

Aims of Study

Periurethral bulking agents have been used previously to enhance urethral coaptation thus augmenting the urethra's contribution to continence. Their use has been limited however by reabsorption or distant migration of material, and the possible immunogenic properties of the substances used. The polymer of dextranomer and hyaluronic acid has no known side effects, and by stimulating fibrosis, enhances the implant's life span without provoking significant inflammation. This study examines its use in women with genuine stress incontinence, looking at tolerability, side effects and short to medium term results.

Methods

This is a twin site study. All patients with a clinical diagnosis of genuine stress incontinence were considered for treatment. There were no specific exclusion criteria, unless patients specifically requested general anaesthesia. Procedures were performed by a consultant urologist or specialist urological trainee. Oral ciprofloxacin was administered pre-operatively and for three days after the procedure. Local anaesthetic was administered periurethrally at the start of the procedure. Instillation was typically 4-8 mls of 2% lignocaine and adrenaline. Using a disposable Implacer, four syringes each of 0.7 mls of polymer were injected at the mid-urethral level, at four circumferential locations. Patients were discharged postoperatively following satisfactory voiding. A total of twenty eight patients have undergone the procedure, median age 71 (31 - 92). Patients were assessed between two months and one year post-operatively in the outpatient clinic, specifically regarding side effects following discharge and effect on incontinence.

Results

All patients tolerated the procedure. One patient described the procedure as worse than anticipated, while all others found the procedure tolerable or better. Three patients experienced post-operative urinary retention. Two resolved after a few days catheterisation. One further required a urethral dilatation under anaesthesia and subsequent intermittent self-catheterisation for six weeks at which point continence was good and residuals negligible. Two patients reported significant discomfort for three and seven days post-operatively. After one to three months, two patients were cured of incontinence, with a further 13 improved. Thus 15/28 (54%) were subjectively improved. Eleven patients (39%) were unchanged, and two (7%) felt their symptoms had deteriorated after the procedure.

Conclusions

Periurethral injection of dextranomer / hyaluronic acid copolymer is a well tolerated outpatient procedure with a low risk of significant complications. It should be considered in patients who do not wish to undergo more invasive treatment, or in those for whom more significant surgical procedures would be inappropriate. In this series, significant improvement was seen in 15 out of 28 patients (54%) after two to six months follow up. Longer term data on a larger cohort of patients will be available at the time of presentation.