

## RESOURCE UTILISATION AND UTILITY FOLLOWING TREATMENT OF STRESS URINARY INCONTINENCE WITH THE ZUIDEX™ SYSTEM

### Hypothesis / aims of study

Stress urinary incontinence (SUI) is a significant cause of disability and dependence, and can be associated with substantial costs, from the perspective of society, healthcare payers and patients. Patients often incur routine care costs, such as those of pads or other protective products, skin care, odour-control products and extra laundry.

The choice of treatment for SUI depends on a number of factors, including the severity of the problem and patient preference, with cost becoming increasingly important. For example, the limited efficacy of conservative treatment means that women continue to use medical resources, and may ultimately require surgery – a relatively costly procedure that requires hospitalisation. Thus, payers are interested in the relationship between costs and patient benefit for different interventions.

The Zuidex™ system (Q-Med AB, Uppsala, Sweden; four pre-filled syringes containing non-animal stabilised hyaluronic acid/dextranomer [NASHA/Dx] gel and the Implacer™) is a new treatment for SUI that has the potential to avoid or delay the need for surgery in women with mild–moderate symptoms. Zuidex treatment can be performed as an office-based procedure, hence avoiding many of the costs associated with surgery.

The effect of Zuidex treatment on resource utilisation and quality of life (QoL; utility) was investigated in a clinical study performed in five European countries. Resource utilisation included medical visits outside the trial, hospitalisation, tests, medication, days off work and pad usage. We present the effect of Zuidex treatment on pad costs, as well as utility measured using the EQ-5D. The EQ-5D is a generic, preference-based instrument that measures QoL on a scale between 0 (dead) and 1 (full health). It allows calculation of quality-adjusted-life-years (QALYs), which is the outcome measure preferred by payers.

### Study design, materials and methods

An open, multicentre study was performed at centres in the UK, Sweden, France, Germany, and Italy. The study was approved by independent ethics committees, and performed in accordance with the Declaration of Helsinki. Enrolled patients (n=139) were at least 18 years of age, had failed previous non-invasive therapy, had been suffering from SUI for 1 year or more, and had not been treated with invasive therapy. Patients were treated with Zuidex and, if the patient was not dry or significantly improved to her own satisfaction, re-treatment was offered at week 8. Patients completed the EQ-5D at baseline and 6 months. Information on resource consumption was collected from physicians and patients at baseline, and at 1, 3 and 6 months.

### Results

A total of 105 patients completed the EQ-5D at both baseline and 6 months. Utility scores for recruited patients (0.8–0.9) were in the normal range for the age group (mean age: 55.3 years), suggesting that the women were generally in good health. However, 38% of women had a utility score of 1.0 at baseline, and therefore had no potential for improvement, as assessed by this questionnaire. Therefore, results are presented for patients with a baseline utility score <1.0 (n=65) (Table 1). For these patients, Zuidex treatment resulted in a utility gain of 0.07 at 6 months compared with baseline. Assuming utility improvement is linear and the 6-month utility score is maintained at 12 months, the QALY gain would be 0.053 for patients with a utility score <1.0 at baseline.

A total of 121 patients had complete data on resource utilisation at 6 months. Weekly pad costs were reduced by 45–47% compared with baseline (Table 1). At baseline, 91% of patients used pads, but this proportion decreased to 65% at 6 months.

**Table 1. Utility and pad costs following treatment with Zuidex**

	Baseline		6 months	
	Mean	SD	Mean	SD
Utility (patients with score <1.0 at baseline; n=65)	0.734	0.151	0.803	0.184
Pad cost/week (€) (n=121)	3.35	2.86	1.75	3.2

SD, standard deviation

**Interpretation of results**

Following Zuidex treatment, utility increased by 0.07 in patients with a score <1.0 at baseline. This compares favourably with scores reported for tension-free vaginal tape or colposuspension (0.01–0.03) (1). Pad usage following Zuidex treatment was reduced by 40–50% compared with baseline.

**Concluding message**

Zuidex treatment can reduce the costs of pad usage in SUI and produces a utility gain at least comparable with tension-free vaginal tape.

**References**

1 A cost–utility analysis of tension-free vaginal tape *versus* colposuspension for primary urodynamic stress incontinence. *BJOG* 2003; **110**: 255–62.

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