

## 518 Abstracts

cord, 16% of children with myelodysplasia are under the risk of a secondary tethering where 87% of these are diagnosed by a neuro-urological surveillance, only. These findings underline the extreme importance of a neuro-urological follow up in children with myelodysplasia after the primary spinal surgery. Since a secondary tethering may occur even at 14 years after the primary closure, the long-term follow-up appears to be necessary.

### Reference:

1. Predictive value of urodynamic evaluation in newborns with myelodysplasia. JAMA, 252:650-2, 1984.

## 109

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Title (type in CAPITAL LETTERS, leave one blank line before the text):

QALYS: AN OBJECTIVE CONTINENCE OUTCOME MEASURE TO DETERMINE THE COST EFFECTIVENESS OF CONSERVATIVE UROGYNACOLOGICAL TREATMENTS

**Aims of study:** Within the health system there appears to be a continuing trend towards increasing costs of treatments despite a declining total health budget. Therefore the costs of treatments and the resulting outcomes are being assessed. A treatment must be cost effective both in terms of the input cost and the output of the clinical result, in order to compete for a finite slice of the health cake. Thus a common yardstick is needed to compare each treatment with another.

The Quality Adjusted Life Year (QALY) is one way in which various unrelated treatments can be compared. A QALY is based upon a quality of life score (QOL) from 0 to 1, with '0' being equivalent to death and '1' to perfect health. One QALY unit represents a year spent in perfect health. The costs of treatments are calculated and then divided by the increased amount of QALY's that have been generated, to obtain a cost/QALY. An efficient treatment will generate positive QALY's at a low cost/QALY.

Our aim was to determine the cost effectiveness of two different regimes for the conservative treatment of urinary incontinence. In particular was it more cost effective to send patients to a Nurse Continence Advisor (NCA) or to the Urogynaecologist (UG), in terms of cost, objective outcomes and improvement in quality of life?

**Methods:** Quality of life was assessed using a validated QOL/QALY questionnaire, the York Questionnaire (1). Patients were prospectively randomised to treatment with either a UG (N= 76) or a NCA (N= 74). Inclusion criteria were urodynamically proven GSI, GSI/DI or DI with a one hour pad test loss of 2- 50 grams. Randomisation was stratified into mild urinary incontinence (pad test 2-9.9 g) or moderate urinary incontinence (pad test 10-50 g). Exclusion criteria were: absent pad test loss or severe pad test loss (>50g), prolapse beyond the introitus, malignancy, voiding difficulty, ring pessary in-situ, recurrent cystitis, and residence outside the metropolitan area. These exclusions were made to ensure that the patients did not have other confounding gynaecological problems, and that they were able to regularly attend for intensive weekly treatment if so randomised.

The UG group was given routine instruction regarding pelvic floor exercises, bladder training, and given vaginal cone weights or anticholinergic drugs when clinically indicated. Patients were also referred to an "outside" physiotherapist if their pelvic floor tone was very weak or acontractile.

After six to eight weeks patients were seen for 15 minutes, and conservative treatment continued. The "intensive" NCA group attended the NCA weekly for 30 minutes and received all of the above treatments, in addition electrical stimulation and perinometer biofeedback was also offered.

Outcome measures at baseline and three months were leaks/week, pad test, and the York Questionnaire.

Both direct and indirect costs were assessed including: consultation costs (NCA A\$22/hr, UG A\$80/hr

[average of consultant and registrar rate], outside physio A\$55/hr), investigations, administration, patient travel costs, and use of urinary pads. Costs were calculated over 5 years, with QALY's being discounted (2) at 6% per annum (which resulted in 5 years being discounted to 4.2124 years). At 5 years successful treatment rates were assumed for conservative treatment at 50%.

The equation for calculating cost was: [trips to the unit x trip cost] - [cost saved on pads/month x 13 x 4.2124] + [clinician costs] + [drug costs/month x 13 x 4.2124] + [administrative costs/hr x hours of visit] + [investigation costs] + [lost time from work x trips to the unit].

**Results:** There were no significant differences between the two groups at baseline. A number of patients did not complete the study (N= 55), with a significantly greater number not completing the UG treatment. The objective outcomes and QOL improved significantly from baseline, with no significant differences between the two groups at three months. The NCA's spent significantly longer with their patients, as would be expected from the trial design, however did not cost significantly more owing to their reduced hourly wage (A\$22 vs A\$80). The final cost/QALY revealed that the NCA treatment was significantly more cost effective than the UG.

	NCA (N= 76)	UG (N= 74)	P Value
Withdrawals from the study	21	34	0.03
Age (years)	57.7	59.3	NS
Parity	2.59	2.72	NS
Weight (kgs)	70.8	74.4	NS
Reduction in leaks/week	8.5	13.0	NS
Reduction in Pad Test (g/hr)	3.3	2.4	NS
QOL gain (%)	1.51	1.21	NS
Reduction of Pad Cost (A\$)2.90		3.52	NS
Clinician Time (minutes)	186	62	0.0001
Clinician Cost (A\$)	68.21	97.70	0.001
Total Cost (A\$)	910	901	NS
<b>Cost/QALY</b>	<b>28,009</b>	<b>35,312</b>	<b>0.03</b>

**Conclusions:** The NCA treatment was more cost effective than the UG both in terms of the cost/QALY and also in terms of compliance to the treatment program.

**References:** 1. A scale of valuations of states of illnesses. Int J Epid 1978;7:347-58  
2. Foundations of cost effectiveness analysis for health and medical practise. NEJM 1977;303:308-16

## 110

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Title (type in CAPITAL LETTERS, leave one blank line before the text):

HEALTH RELATED QUALITY OF LIFE OF PATIENTS WITH OVERACTIVE BLADDER RECEIVING  
TOLTERODINE ONCE-DAILY

**Aims of Study:** This study compared the health-related quality of life (HRQOL) as measured by the Kings Health Questionnaire (KHQ) in overactive bladder (OAB) patients receiving treatment with tolterodine 4mg once-daily (tolterodine) or placebo in the largest intervention trial in OAB to date.

**Methods:** A randomized, parallel groups, double-blind, multinational study compared the efficacy and safety of tolterodine with placebo. OAB patients (n = 1015) with a minimum of eight micturitions/24hrs and > 5 urge incontinence episodes/wk received tolterodine 4 mg once-daily or placebo. The KHQ, self-administered at baseline and end of treatment (12 weeks), is a 33-item, disease-specific HRQoL measure designed to evaluate the impact of urinary