

## SUPRAPUBIC CATHETER INSERTION IN SPINAL CORD INJURED PATIENTS – A CHALLENGING PROCEDURE

### Hypothesis / aims of study

Suprapubic catheterisation (SPC) is an acceptable and well tolerated method of bladder management in selected Spinal Cord Injured (SCI) patients. SPC placement in this group of patients can be challenging and associated with complications. At our institute selected SCI patients with neuropathic bladder have SPC insertion as a day case, first change of SPC is performed in our catheter clinic at 6 weeks and subsequent SPC changes are performed in the community by the district nurses. We present our experience with this technique over a one year period

### Study design, materials and methods

A retrospective analysis identified 45 SCI patients who had SPC inserted over a period of twelve months between June 2009 and June 2010 at our institution. The procedure was performed as a day case under appropriate anaesthesia as dictated by the anaesthetist. We used the Seldinger technique of SPC insertion (MediPlus) in all patients and ultrasound guidance as used when there was a history of abdominal surgery. We evaluated the problems encountered during the procedure and post operative complications.

### Results

The mean age was 54 years (range 15 -88). Male to female ratio was 2.75:1, levels of SCI patients were as follows: cervical: 28; thoracic: 9; lumbar: 4; multiple sclerosis 2, post sacrectomy 1, cauda equina 1.

All procedures were completed successfully. Ultrasound scan was utilised in 12 cases. The filling of bladder was difficult in most of the cases due to small contracted bladders. Urinary leakage around the urethral orifice was a problem especially in females. Importantly it was quite challenging to position the patient for insertion of cystoscope and SPC. In 4 cases a urethral catheter was inserted to perform irrigation for 6 hours post-op. One post op haematuria required bladder washout in theatre. 3 patients developed urinary tract infection. Autonomic dysreflexia occurred in 2 patients during the procedure. All patients returned for successful first change of SPC to our hospital in six weeks. However, 8/45 (18%) of the SPC could not be replaced by district nurses subsequently. Hence they went back for urethral catheters and booked for reinsertion of SPC.

### Concluding message

SPC insertion in SCI patients is a challenging procedure. This should be performed under controlled conditions in theatre with anaesthetist present and utilising USS where appropriate. There is a high re-insertion rate but this seems to be related to SPC changing in the community practice

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<b>Is this a clinical trial?</b>	No
<b>What were the subjects in the study?</b>	NONE