

## MANAGEMENT OF POST-PARTUM URINARY RETENTION IN AUSTRALIAN HOSPITALS

### Hypothesis / aims of study

Post-partum urinary retention (PPUR) is defined as the absence of spontaneous micturition within six hours of vaginal delivery, or after removal of an indwelling catheter following caesarean section(1). If not appropriately managed, even one episode of PPUR may result in irreversible damage to the detrusor muscle and to the autonomic nerve and vascular supply lines to the detrusor, resulting in long term voiding dysfunction(2). There is low consensus of diagnosis and management of PPUR in the current literature. This study was designed to answer the question: What is current clinical practice in the assessment and management of PPUR in Australian hospitals? The results of an on-line survey undertaken to establish current clinical criteria for intensive monitoring in women with PPUR in Australian maternity units are reported here.

### Study design, materials and methods

Using the Women's Healthcare Australia contact database, initial email contact was made with physiotherapists working in a variety of large and small maternity hospitals, general hospitals with a maternity unit, including urban and rural, public and private hospitals across Australia, inviting them to participate in the survey. Clinicians who agreed to take part were emailed the link to an on-line survey. Data sought included inpatient and outpatient protocols for women with PPUR, staff roles, symptom management, discharge criteria and suggested changes to the protocols. All responses remained anonymous. Descriptive analysis of the survey results was performed with qualitative data grouped according to themes. Quantitative data were summarised in terms of means and standard deviations (continuous data) or frequencies and ranges (ordinal data) to describe the sample.

### Results

Twenty-three of 61 (38%) hospitals responded to the survey. Twenty of 23 (87%) hospitals had published PPUR management protocols. Nineteen diagnostic criteria were reported for initial diagnosis of PPUR, which were grouped as: voiding dysfunctions (7 of the 19 criteria); urinary leakage (4 of 19), sensory disturbances (6 of 19) and palpation of distended bladder (2 of 19). Initial inpatient care was consistently carried out by doctors (100%), nurses (91%) and physiotherapists (93%). Critical post-void residual volumes for initiating catheterisation varied between 100-200ml, with 10/23 hospitals using 150ml (43%). Nineteen of 23 reported formal criteria for discharge, including voided volume and post-void residual volume (90%), sensation to void and successful trial of void (74%), and other symptoms (47%). Patients were followed up post-discharge by phone call (62%), hospital physiotherapist (52%), ward nursing staff (19%), community nurse/physiotherapist (24%), GP (24%), urogynaecology appointment (24%).

### Interpretation of results

The results of this survey revealed low consensus in initial diagnostic criteria and overall management of PPUR in a wide selection of Australian hospitals, and are consistent with current published literature.

### Concluding message

Current PPUR management protocols are both physically and psychologically demanding for a new mother, and the cascade of events required following insertion of an indwelling catheter incurs extra costs for hospitals. The results of this survey will be used as the basis for an observational study of the natural course of PPUR which, in turn may lead to the development of more consistent diagnostic criteria and management strategies.

### References

1. Yip SK, Brieger G, Hin LY, & Chung T. Acta Obstetric Gynecol Scand. 1997; 76:667-672.
2. Chung L, Dyh C, Hong T, et al. Aust NZ J Obstet Gynecol. 2002; 42(4):365-368

### Disclosures

**Funding:** NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Royal Women's Hospital Human Research Ethics Committee (Project 13/35, 13 Nov 2013) **Helsinki:** Yes **Informed Consent:** Yes