

## EVALUATION OF THE MANAGEMENT OF POSTPARTUM VOIDING DYSFUNCTION

### Hypothesis / aims of study

To evaluate a multidisciplinary approach to the management of postpartum voiding dysfunction and its effect on clinical outcome and patient satisfaction. Secondly, to audit adherence to our peripartum voiding protocol.

### Study design, materials and methods

This study was conducted at a large tertiary referral hospital (>5000 births per annum). All women with postpartum voiding dysfunction who delivered at the hospital between April to September 2007 were identified and their notes were audited. Demographic details, clinical information on peripartum risk factors, presenting symptoms, and management were collected. The adherence to the unit's peripartum voiding protocol was evaluated.

### Results

The total number of deliveries during the study period of 6 months was 2500. There were 11 patients with voiding problems making the overall incidence of postpartum voiding dysfunction 0.4%. The age range was 20-39 years. 10 of the women were primiparous, and one was multiparous. 5 were Caucasian, 5 of Asian and 1 of African origin. The gestation age varied from 37 to 42 weeks. Duration of first stage was 9 to 22 hours. Duration of 2<sup>nd</sup> stage ranged from 30 minutes to 3 ½ hours. 6 of the patients had an epidural, one spinal, and 4 entonox alone for analgesia in labour. 7 had instrumental deliveries, 3 spontaneous vertex deliveries, and 1 a Caesarean section. 9 women were catheterised in labour. 3 women voided within 3 hours post delivery or post catheter removal, 2 between 3 and 6 hours, 3 after 6 hours, and for 3 others the first void was not documented. There was a deviation from the unit voiding protocol in all 11 patients.

Following identification of voiding dysfunction, all women were managed by a multidisciplinary team involving midwives, obstetricians, urogynaecologists and physiotherapists. There was a designated consultant with a special interest in postnatal problems providing support to junior staff. Each woman's care was co-ordinated by a Specialist Perineal Midwife.

In response to the diagnosis of voiding dysfunction, 5 women had a residual urine measurement performed. 5 had residual urine measurement as well as uro-flow assessment using equipment in the urogynaecology unit. 1 woman (with a previous history of urinary retention) refused any investigations and self-managed. 7 patients responded well to timed voiding and double voiding. 3 patients were self-catheterising intermittently, and 1 who was unable to self-catheterise, required a long-term in-dwelling catheter. All patients' voiding difficulties resolved by 1 to 5 weeks postpartum.

### Interpretation of results

Postpartum voiding dysfunction is a distressing problem which was diagnosed in 11(0.4%) of patients within a 6 months period. Risk factors in our cohort included instrumental delivery, regional analgesia, prolonged labour, catheterisation and labour, and perineal trauma. These are comparable to other studies (1,2). Deviation from the voiding protocol was noted in all cases.

### Concluding message

Multidisciplinary approach improves the clinical outcome in women with peripartum voiding difficulty. The introduction of a Specialist Perineal Midwife, providing support to women and co-ordinating their care until the problem is resolved, has improved patient compliance and satisfaction as ascertained by personal feedback. We are currently assessing patient outcome and satisfaction more formally as part of an on-going audit of the service. There needs to be more emphasis on compliance of staff to the peripartum voiding protocol in order to further decrease the incidence of postpartum voiding dysfunction.

### References

1. Am J Obstet Gynecol. 2002 Aug; 187 (2): 430-3
2. Int Urogynecol J Pelvic Floor Dysfunct. 2007 May; 18(5): 521-4

<b>Specify source of funding or grant</b>	<b>non-funded audit</b>
<b>Is this a clinical trial?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>No</b>
<b>This study did not require ethics committee approval because</b>	<b>part of the on-going hospital audit, registered with audit committee at St George's Hospital</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>No</b>