

INTRAPARTUM AND POSTNATAL BLADDER CARE: A SURVEY OF MIDWIVES' CURRENT PRACTICE

Hypothesis / aims of study

Registered midwives in the UK independently manage a large number of low risk labours and conduct normal vaginal deliveries as well as providing one-to-one care in labour for high risk obstetrically managed patients. They also contribute significantly to the postnatal care of all women irrespective of mode of delivery. Urological problems in pregnancy are very common. Postpartum urinary retention has a reported incidence of up to 14.1% after vaginal delivery and 24.1% following caesarean section and has a number of well established risk factors (1). Following epidural anaesthesia it has been shown that the bladder may take up to 8 hours to regain sensation and during this time over-distension may occur which can potentially lead to permanent detrusor dysfunction (2). In the UK there is a relative lack of national guidelines relating to bladder care in pregnancy and the puerperium and it has been shown that there is wide variation in local clinical guidelines between individual obstetric units (3). The aim of this survey was to assess the scope of current practice by midwives working in a single maternity unit and to highlight possible areas of under-performance. It also aimed to assess the level of compliance with the limited national guidelines from the Royal College of Obstetricians and Gynaecologists (RCOG) and the National Institute for Clinical Excellence (NICE).

Study design, materials and methods

The survey was conducted during February and March 2009 in a busy district general hospital in greater London which delivers over 4200 babies per year and currently has 126 midwives in employment, a number of whom work primarily in the community setting. Since December 2006 the hospital has had a local clinical guideline for bladder care in labour and postnatally which was introduced by the lead clinician for Urogynaecology in the unit. A data collection tool in the form of a questionnaire was developed and distributed to midwives working across all clinical areas. The survey was completed anonymously and returned via a collection box.

Results

75 completed questionnaires were received, giving a response rate of 60%. All clinical areas were represented. The midwives surveyed stated they had been practising for an average of 17.3 years (range 3 months to 36 years).

Intrapartum bladder care – When asked how often in labour a patient should be encouraged to void the most frequent response was 2–3 hourly (41 midwives, 55%). 15 midwives (20%) answered 1–2 hourly, 15 (20%) 3–4 hourly and 3 (4%) 4–6 hourly. No midwife answered less than 6 hourly. When asked how soon one should become concerned that a patient has not passed urine the mean response was 3.9h (mode 4h, range 2–6h) and when asked when one should resort to catheterisation the mean response was 4.8h (mode 4h, range 2–12h). 71 midwives (95%) routinely document the frequency of bladder emptying on the partogram as recommended by NICE. Few midwives routinely empty the bladder at full dilatation or remove the indwelling catheter before active pushing – 16 (22%) and 10 (13%) respectively.

Awareness of risk factors – Midwives were asked to circle a number of accepted risk factors for the development of postnatal urinary retention as true or false. The percentages of correct answers for each individual risk factor were relatively high and as follows: instrumental delivery 91%; epidural anaesthesia 89%; prolonged labour 88%; primiparity 84%; caesarean section 81%; 3th and 4th degree perineal trauma 80% and manual removal of placenta 76%. The exception was 1st and 2nd degree perineal trauma – only 15 midwives (20%) were aware that minor tears and episiotomies also increase the risk of postnatal urinary retention.

Postnatal bladder care – When asked how soon following normal vaginal delivery women should be encouraged to void the mean response was 2.3h (mode 2h, range 1–6h). When asked how soon one should become concerned that a patient is unable to void and how soon action should be taken, the mean responses were 4.1h (mode 4h, 1–24h) and 4.9h (mode 4h, range 1–24h) respectively. 49 midwives (68%) would ask the patient to try voiding in the bath or shower and 33 (45%) would pour water over her perineum. Only 21 (29%) would give analgesia at this time and only 4 (5%) would consider using a bladder scanner to assess urine volume. When asked when one should resort to catheterisation the mean response was 5.5h (mode 4h, range 2–24h). 12 midwives (16%) stated that they would not catheterise by the maximum elapsed time of 6 hours recommended by the RCOG and NICE. 71 midwives (95%) record the timing of the first void post delivery as recommended by NICE but only 42 (56%) also record the volume. 74 midwives (99%) routinely discuss pelvic floor exercises in the postnatal period. 53 midwives (71%) routinely enquire about urinary incontinence as recommended by NICE but only 44 (59%) enquire about the return of bladder sensation.

Removal of indwelling catheters – Midwives were asked to state the *minimum* number of hours post delivery after which they would be happy to remove an indwelling catheter under various circumstances. After a normal vaginal delivery with an epidural the mean response was 3.7h (mode 2h, range 2–12h). After a full epidural top up in theatre (for instrumental delivery, manual removal of placenta or repair of 3rd or 4th degree tear) the mean response was 10.1h (mode 12h, range 2–48h). 41 midwives (55%) stated that they would remove the catheter before the minimum of 12 hours recommended by the RCOG. Following a caesarean section the mean response was 14.7 h (mode 12h, range 2–24h). 12 midwives (16%) stated that they would remove the catheter before the minimum of 12 hours recommended by NICE.

Interpretation of results

The results highlight the significant variation in practice amongst midwives working in a single unit despite established clinical guidelines, as demonstrated by the wide ranges in most of their responses. Overall the adherence to national guidelines is relatively good at 84–95% but the results also identify specific areas of potentially substandard care. The main area which raises concern is the apparent tendency to remove urethral catheters considerably earlier than recommended following a full epidural top-up, which may occur in up to 55% of cases. This is particularly worrying when combined with the fact that 41% of the midwives surveyed would not subsequently ask about the return of sensation of bladder filling. Other learning points were identified including the fact that minor degrees of perineal trauma can predispose to urinary retention and that if a patient is having difficulty voiding

postpartum then simple conservative measures such as giving analgesia should be considered first. There appeared to be a trend towards potentially premature catheterisation in the postnatal period – 44% of midwives said they would catheterise between 2 and 4 hours if the patient had not voided successfully. This might itself contribute to morbidity by iatrogenic urinary tract infection. The use of a bladder scanner might well reduce the incidence of unnecessary catheterisations but only 4 of the midwives surveyed would consider assessing bladder volume using this method.

Concluding message

Bladder management is an important and often neglected part of maternity care and all health care professionals must be vigilant in order to anticipate and prevent unrecognised urinary retention and to identify other urinary problems at an early stage. Whilst acknowledging that many aspects of bladder care are individualised, there are a number of more narrowly-defined standards of care which should be met. Potential areas of substandard care can be improved on through education, training and audit. Further research and evidence-based guidelines are needed in this area to reduce maternal morbidity.

References

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<i>Specify source of funding or grant</i>	No funding was received
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	this was a survey of opinion amongst midwives as to what constitutes best practice (with the aim of improving education and training)
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No