

# INTRAPARTUM AND POSTNATAL BLADDER CARE

## BACKGROUND

Urinary retention is uncommon but carries significant morbidity and the risk is increased by a number of factors including epidural analgesia (Teo, et al. 2007).

Significant irreversible damage to the detrusor muscle can occur following only one episode of urinary retention if the bladder is distended by 800 mL-1000 mL, leading to long term morbidity for the women affected.

## INTRAPARTUM BLADDER CARE

### DURING LABOUR

It is important to ensure that the woman in established labour is passing urine every four hours and ensure urine output is adequate in order to prevent the effects of a full bladder on progress of labour, urine leakage in second stage and the risk of postpartum haemorrhage. If a woman has difficulty passing urine after four hours then an in/out catheter should be considered.

### WOMEN WITH EPIDURAL OR SPINAL ANALGESIA

Women with epidural or spinal analgesia must have an indwelling urinary catheter (IDC) inserted once the epidural has taken effect. This will ensure the bladder is empty, as the urge to pass urine is reduced and mobility is restricted. The input and output should be documented on a fluid balance chart.

In second stage the indwelling catheter balloon should be deflated with the urinary catheter secured by tape to the woman's thigh.

If the urinary catheter is displaced during the birth it should be replaced as soon as practically possible following the birth as the woman will still be under the effect of the epidural / spinal anaesthesia at this point.

### INSTRUMENTAL OR ASSISTED BIRTH

It is important to ensure that the bladder is empty before instrumental birth is undertaken.

## CAESAREAN SECTION

All women who are giving birth via caesarean section should have an indwelling urinary catheter in-situ before the start of surgery.

## POSTNATAL BLADDER CARE – WOMEN WITH RISK FACTORS

### RISK FACTORS

1. Known bladder dysfunction
2. Extended perineal tear
3. Prolonged active 2<sup>nd</sup> stage (primi > 2hrs, multip > 1hr)
4. Spinal or epidural analgesia
5. Instrumental delivery

### WOMEN WITHOUT IDC

- Woman should have two recorded voids of over 200 mL before she can be considered to be beyond the risk of urinary retention.
- The first void should occur within six hours of birth.
- Encourage the woman to void by keeping her pain free and facilitating privacy.

### WOMEN WITH IDC

The indwelling urinary catheter should remain in-situ for a minimum of six hours following removal of the epidural catheter or the last administration of spinal anaesthetic.

The urinary catheter may remain in-situ for twelve hours following regional anaesthesia for caesarean section.

Prior to removal of the indwelling urinary catheter check:

- the operative notes to ensure there is no indication for prolonged catheterisation
- the level of the epidural/spinal block and the return of full sensation the woman is well enough to mobilise independently

Following removal of the indwelling urinary catheter:

- the fluid balance chart should be continued
- the woman should have two recorded voids of over 200 mL before she can be considered to be beyond the risk of urinary retention
- the first void should occur within six hours of removal of the urinary catheter
- encourage the woman to void by keeping her pain free and facilitating privacy

If she is unable to void six hours after removal of the IDC the possibility of urinary retention should be considered.

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## TRANSFER TO A PRIMARY UNIT

If mother and baby wish to transfer to a Primary Unit for postnatal care, they can do so with an indwelling urinary catheter in-situ providing they are otherwise suitable for transfer and the transfer within the immediate postnatal period is appropriate.

The ongoing care of the woman with an indwelling urinary catheter will be the same whether she is in a Primary Unit or Secondary/Tertiary Unit. The woman who is diagnosed or suspected of having urinary retention will require transfer back to the Secondary Unit.

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## RECOGNITION OF URINARY RETENTION

Clinical signs and symptoms of urinary retention include:

- bladder pain
- dysuria
- frequency and passing small amounts of urine
- unable to void or hesitancy
- palpable distended bladder

If urinary retention is suspected scan the bladder to assess the residual volume. If a bladder scanner is not available insert an in/out catheter. The residual volume should be recorded in the clinical record.

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## MANAGEMENT OF URINARY RETENTION

- Residual volume < 250 mL – manage conservatively with simple measures to encourage voiding and a review of progress in two to three hours
- Residual volume of 250-500 mL – drain the bladder using an in/out catheter and manage conservatively for a further six hours, if still unable to void insert an indwelling urinary catheter for 24 hours
- Residual volume of > 500 mL – insert an indwelling urinary catheter for 24 hours
- Residual volume > 1000 mL – insert indwelling catheter for 48-72 hours.
- The woman should be reviewed by a physiotherapist

Trial of void should be enough for most women following prolonged catheterisation.

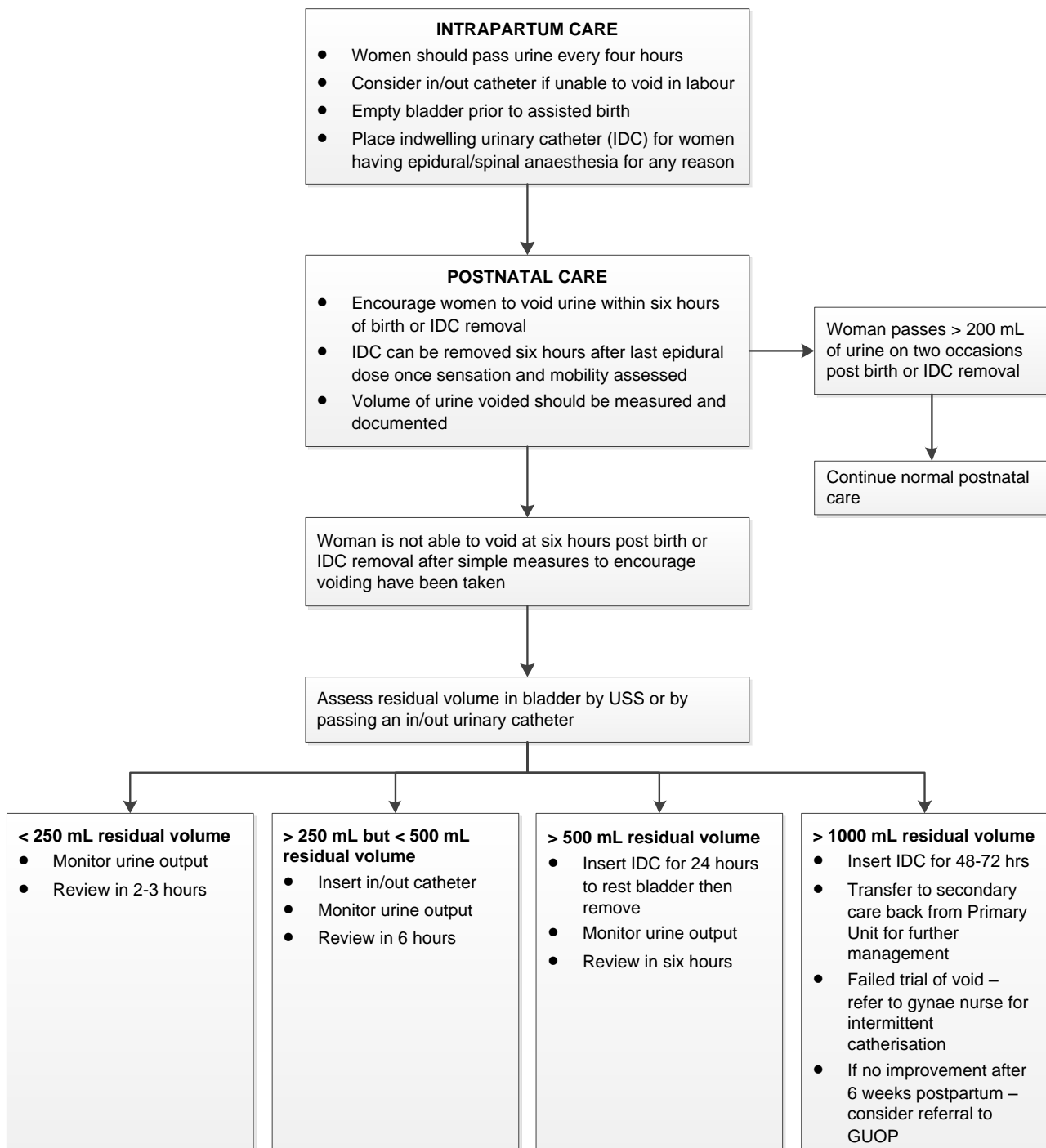
If a woman is unable to void following trial of void, she should be taught to self catheterise by a gynae nurse and follow-up should be arranged in the Gynaecology Assessment Unit (GAU).

Voided volumes/residual need to be recorded at least twice a day (morning and evening). The woman should be reviewed weekly in GAU. When residual volumes are consistently less than 150 mL then the woman can be discharged.

The assigned O&G team should follow-up and manage the care of the woman.

If there is no improvement after 6 weeks, consider referral to urology team for a GUOP appointment.

## INTRAPARTUM AND POSTNATAL BLADDER CARE ALGORITHM



Ref.238709

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## BIBLIOGRAPHY/FURTHER READING

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