



# **Bladder Care**

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Authors Name:	Mr. Ed	Neale/Mr. J	ose	ph Nat	tey/Kerry Cay	ley/ Erica Puri	
Authors Job Title:	Obstetric consultant, Obstetric consultant, Urogynaecology Nurse, Midwife						
Authors Division:	Women	's and Child	ren'	's			
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### Disclaimer

Since every patient's history is different, and even the most exhaustive sources of information cannot cover every possible eventuality, you should be aware that all information is provided in this document on the basis that the healthcare professionals responsible for patient care will retain full and sole responsibility for decisions relating to patient care; the document is intended to supplement, not substitute for, the expertise and judgment of physicians, pharmacists or other healthcare professionals and should not be taken as an indication of suitability of a particular treatment for a particular individual.



The ultimate responsibility for the use of the guideline, dosage of drugs and correct following of instructions as well as the interpretation of the published material **lies solely with you** as the medical practitioner.

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# **Guideline Statement**

Intrapartum bladder care involves the identification of risk factors, prevention, detection, and early management of voiding dysfunction during labour and after birth.

Postpartum urinary retention (PUR) varies from 45 in a 1000 in women who have just delivered babies." (Blomstrand et al., 2015, p.108)

"Reported prevalence for overt (symptomatic) PUR range from 3 to 47 in a 1000 i.e. the inability to void spontaneous within 6 h of vaginal delivery or removal of a catheter after a caesarean section [1, 7]. For covert (asymptomatic) PUR, defined as a postvoid residual volume (PVRV) of at least 150 mL after spontaneous micturition, prevalences of even up to 45 in a 100have been reported [2]." (Mulder et al., 2016, p.55)

"Postpartum urinary voiding dysfunction occurs in 7-40 in a 1000 of all deliveries." (Cox and Reid, 2018, p.81)

A pregnant/birth woman/person's physical and psychological wellbeing can be adversely affected by poor urogenital health. The physiological changes that occur in pregnancy pre-dispose pregnant/birthing women/people to factors that may negatively affect their individual bladder function. Therefore throughout the childbearing period promoting and preserving good urogenital health is an essential component of obstetric and midwifery care.

# **Executive Summary**

Bladder care management should be discussed and instigated with consent for all labouring women/people. The most important part of management in postpartum urinary retention is prevention.

The aim of the Guideline is:

- To recognise pregnant/birthing women/people with an increased risk of developing urinary voiding dysfunction.
- To understand the problems associated with bladder over-distention and urinary retention in labour and following birth.
- To provide a systematic and evidence-based approach towards managing bladder care during the antenatal, labour and the postnatal period.
- To reduce the risk of significant short term and long-term morbidity associated with postpartum voiding dysfunction.

# Definitions

ADAU- Antenatal Day assessment Unit EUA-Examination Under anesthetics ISC- Intermittent self Catheterisation LSCS-Lower segment Caesarean section MCA-Maternity Care Assistance[Rb1][EP2] MSU-Midstream specimen of Urine





MROP- Manual Removal of Placenta PPH- Post Partum Hemorrhage PUR – Postpartum Urinary retention PVRV- Postvoid residual volume TWOC-Trial without Catheter

# 1.0 Roles and Responsibilities:

Midwifery staff must ensure to document the birthing woman/person's first void [Rb3][EP4]postbirth and this must occur within 3-6 hours of delivery.

If there are concerns regarding urinary retention/voiding difficulty, escalate to a obstetrician. All documentation relating to bladder care must be documented on Ecare.

# 2.0 Implementation and dissemination of document

This Guideline is available on the Intranet and has followed the Guideline review process prior to publication.

NICE (2006) Postnatal care up to 8 weeks after birth.CG37

NICE (2014) Intrapartum care for healthy women and babies CG190

NICE (2021) Postnatal Care NG194

# 3.0 Processes and procedures

#### 3.1 Risk Factors for Postpartum Urinary and Bladder Problems and symptoms.

All pregnant/birthing women/people are at risk of developing urinary retention however the following factors increase the chance of experiencing difficulty in passing urine after birth.-

Risk Factors	symptoms				
<ul> <li>Primigravida (1<sup>st</sup> pregnancy)</li> <li>Previous history of bladder dysfunction</li> <li>Fetal weight ≥4kg</li> <li>Epidural / Spinal</li> <li>Prolonged labour (1<sup>st</sup> &amp; 2<sup>nd</sup> stages)</li> <li>Instrumental Birth</li> <li>Caesarean Birth</li> <li>Vulval &amp; Perineal injury (Including bruising, haematoma, oedema, episiotomy and tears requiring suturing)</li> <li>Anal sphincter injury (3<sup>rd</sup> &amp; 4<sup>th</sup> degree tears)</li> </ul>	<ul> <li>Frequency of micturition</li> <li>Urinating only small amounts of urine</li> <li>Hesitancy (difficulty in starting urine flow)</li> <li>Urgency (unable to delay voiding urine)</li> <li>Incomplete voiding (bladder does not feel empty after voiding urine)</li> <li>No sensation to urinate</li> <li>Straining to urinate</li> <li>Bladder pain (lower abdominal pain)</li> <li>Inability to urinate when bladder feels full Dysuria</li> </ul>				



Be aware that pregnant/birthing women/people with multiple risk factors are at significant risk of postpartum urinary retention leading to short- and long-term voiding dysfunction. Close monitoring of bladder function is essential.

Many women with voiding dysfunction peri- and postpartum may have no apparent risk factors and all women should be regarded as at risk and managed accordingly.

#### 3.2 Symptoms of Urinary Retention/Incomplete Bladder Emptying

Symptoms of acute retention are much more obvious as pregnant/birthing women/people are not able to void and suffer an associated painful bladder. However, the pain should not be misdiagnosed as caesarean wound pain.

Symptoms of incomplete emptying / chronic retention / overflow of the bladder in the postpartum period include:

- Difficulty in initiating a void 6 hours after birth or removal of catheter
- The feeling of bladder fullness after voiding
- Dribbling of urine post micturition
- Significant urinary incontinence
- Frequency with small, voided volumes
- Poor urinary flow with straining to void
- Nocturia more than 2 times which is not related to baby feeding
- Deviated uterus, palpable bladder and/or heavy lochia

#### 3.3 Antenatal period

As part of the booking history pregnant/birthing women/people should be asked about their urogenital health. Questions should aim to find out if there is any prior history of bladder dysfunction such as;

- Stress incontinence
- Urge incontinence
- Regular occurrence of urinary tract infections (UTI's)
- Bladder/pelvic floor surgery

Midwives should also regularly enquire about bladder function and voiding issues throughout the antenatal period to identify developing issues and offer an obstetric consultant review if significant urogenital health issues are identified.

To further decrease the risk of bladder dysfunction problems occurring and aid pregnant women/people in preserving good bladder function and urogenital health, midwives should offer advice on:

- the importance of adequate hydration
- good perineal hygiene



- the passing of urine following sexual intercourse to reduce the risk of UTI's.
- the advantages of regular gentle exercise such as walking and
- regular specific pelvic floor exercises
- benefits of a well-balanced diet in supporting and maintaining good pelvic floor muscle tone and reduce the risk of chronic constipation Midwives and obstetricians should be mindful during discussions with women about urogenital health that for many women this is a sensitive topic to talk about and acknowledging or divulging problems may be difficult for them. All discussions relating to urogenital health should be approached sensitively and with empathy.

#### 3.4 Intrapartum Bladder Care

The volume of urine in the bladder should <u>rarely</u> exceed 500ml and should <u>never</u> exceed 600ml. Over-distension of the bladder with more than 1000ml of urine is a significant risk for bladder injury. A full bladder can affect labour by:

- Delaying descent of the fetal presenting part
- Reducing efficiency of uterine contractions
- Causing unexpected pain
- Causing overflow of urine during expulsive uterine contractions and voluntary pushing in 2<sup>nd</sup> stage (increasing risk of trauma to the bladder)
- Delay the delivery of the placenta
- Inhibiting uterine contractions post-delivery therefore increasing the risk of post-partum haemorrhage

All labouring women/people should be encouraged to urinate every 3-4 hours to prevent over distension of the bladder. Urine volumes should be measured and documented on eCare and the fluid balance chart. [Rb5][EP6]

Inability to urinate:

If unable to urinate spontaneously at the first attempt, encourage pregnant/birthing women/people to increase oral fluids and employ conservative sensory methods to stimulate voiding such as running a water tap.

A second attempt to urinate should be encouraged after one hour after of the first attempt. If not urinated for 4 hours catheterisation must be considered. If there is a significant reduction in urinary output this must be reported to the obstetrician.

If a labouring woman/person is unable to pass urine and it has been more than 4 hours since they last urinated or their bladder is clinically palpable on abdominal examination, intermittent or 'in-out' catheterisation should be discussed with the birthing woman/person and with consent, a Pennine's catheter should be used to empty the bladder.

If the birthing woman/person is still unable to pass urine and requires re-catheterisation an indwelling catheter should discussed and with consent, used to prevent potential trauma and infection to the



urethra from repeated catheterisations. The catheter is to be attached to a normal catheter bag allowing free urine drainage to keep the bladder empty.

- Urethral catheterisation **MUST** be performed using aseptic techniques and following the swab count protocol.
- Consider using lubricating gels to minimise pain, trauma and reduce risk of infection.
- Catheters should be checked a minimum of four hourly to ensure there is adequate drainage of urine. The catheter bag should be emptied when it is no more than 2/3rds full. If the bag becomes too heavy, it can cause discomfort and potential trauma to the urethra.
- Catheter bags should be attached to the side of the bed; the bag should be placed above floor level and below bladder level to prevent reflux or contamination which increases the risk of urinary infections.
- The catheter care plan in the birthing woman/person's notes must be completed when a Foley's catheter has been inserted.

Birthing women/people who have a spinal or very dense epidural regional analgesia will have no <u>bladder sensations and be unable to urinate spontaneously.</u> An in-dwelling catheter should be inserted to avoid urinary retention and over-distension of the bladder.

#### A woman in labour should not go more than 4 hours without urinating.

#### 3.4.1 First stage of labour

- Offer to test a urine sample and dipstick test at the start of active labour (send MSU, if the dipstick is positive) and document. If ketones present, review fluid intake.
- Ensure adequate fluid intake oral or intravenous.
- Encourage woman to urinate every 3-4 hours and document.
- All women who have any form of catheter at any time should be on a fluid balance chart. Urine volume should be recorded on eCare

• • Prolonged use of oxytocin can lead to fluid retention and reduced urinary output and this should be borne in mind when assessing urine volume

- If urine volume <100mls review fluid intake and offer palpation for bladder. If volume >500mls, suggest birthing woman/person empties bladder more frequently.
- Record the colour of any urine passed. Dark urine suggests dehydration.



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If the birthing woman/person is receiving IV fluids, has a discrepancy between input/output or obvious bladder (visible/palpable) and unable to pass urine after 4 hours, discuss and offer cathetrisation.[Rb7][EP8]

This can be an in/out catheterisation initially, however if further catheterisations are required, the complications of repeated use of "in/out" catheters should be discussed with the birthing woman/person and an indwelling catheter should be offered Catheterisation should be done using aseptic technique and Instillagel, local anaesthetic gel. [Rb9][EP10]

 If a self-retaining (Foley's) catheter is inserted, it should be loose enough to allow the balloon to be above the presenting part as it descends below the bladder neck during the late first stage and second stage of labour. This should be removed prior to the onset of pushing.

•

#### Document:

- the time and indication of catheterisation
- type and size of the catheter
- the volume of urine obtained

#### 3.4.2 Second Stage of labour

In the second stage of labour, birthing women/people who have an indwelling catheter in-situ should have it removed prior to commencement of pushing.

Removing the catheter for second stage of labour is recommended because the catheter bulb can be dislodged through the urethra and cause significant trauma.

- Operative delivery-empty bladder prior to instrumental delivery.
- Caesarean section all birthing women/people should have an in-dwelling Foley catheter inserted before commencement of caesarean.
- 3<sup>rd</sup> stage all operative procedures under regional anaesthesia for example spinal or epidural require an in-dwelling catheter.

#### 3.5 Postnatal Management (see Flow chart A):

- <u>All</u> birthing women/people should be encouraged to urinate before leaving the labour ward, and urinate within 6 hours of birth
- A verbal handover must include time of birth and whether the birthing woman/person has urinated.
- The time and volume in mls of the first post birth urination must be documented and included in the hand over.

If the urine volume is <150ml on three occasions in 24 hours or if the birthing woman/person is unable to urinate for 6 hours or more after birth or catheter removal, check bladder volume with portable bladder scan.

- If post-urination bladder residual volume is >150ml, the obstetrician should discuss a management plan with the birthing woman/person which should be documented and include:
  - insert an in/out catheter in the first instance using an aseptic technique and anaesthetic gel after verbal informed consent.
  - Perform a urinalysis and to commence antibiotics if nitrite positive.
- If volume drained is <500mls, encourage the woman to drink normally and void again within 4 to 6 hours. If the next post void residual is still >150mls then consider insertion of an indwelling (Foley's) catheter with a free drainage bag for up to 24 or 48 hours.
- If the urine volume drained is >500ml, document in the maternal notes and for obstetric plan to include: offer to insert an indwelling (Foley's) catheter with free drainage bag which is left in up to 24 or 48 hours followed by trial without catheter.
- All birthing women/people with voiding dysfunction should be offered to have a clean specimen of urine sent for culture and sensitivity.
- Birthing women/people with voiding dysfunction should have their fluid balance recorded. [Rb11][EP12]
- Offer to examine the perineum and, if swollen or painful, offer to insert a catheter until the swelling and pain have settled. Adequate analgesia is important, as perineal pain is a significant factor in the development of retention.
- Constipation should be avoided, and treatment offered if required.
- Ensure there is good analgesia after instrumental or traumatic vaginal delivery and caesarean section. Poorly controlled pain may lead to postpartum urinary retention.
- If a woman is on enhanced recovery following an elective caesarean section, the catheter should be removed after 6 hours. If the 6 hours falls after 20.00, this should be left overnight and to be removed at 06.00.

If birthing women/people have birthed at home, their midwife should inform them of the importance of passing urine within 6 hours of the birth of their baby. If is they are unable to pass urine spontaneously within this time they should contact the midwife or Delivery Suite for advice.

The midwife receiving the call should ask questions assessing for signs of urinary retention and give appropriate advice appropriate (see subsequent post-delivery bladder care below).

The birthing woman/person may require a review by a community midwife at home or transfer to Delivery Suite for review by the obstetric team.

#### 3.5.1 When Indwelling Catheters should be Used or Considered in the Postpartum Period

An indwelling catheter **must** be used for the following:



- Every delivery that takes place in theatre i.e. LSCS/EUA/PPH.
- Perineal repairs that take place in theatre
- MROP that are performed in theatre
- Birthing women/people who have a vaginal pack in-situ should have an indwelling catheter and this should remain in-situ until the pack is removed

Insertion of indwelling catheter **should** be strongly considered for the following:

- Top up epidural block in the room with instrumental delivery
- Instrumental delivery in the room
- Urethral/para-urethral trauma
- Swollen or painful perineum
- Significant reduced sensation in legs
- Previous voiding problems/retention/incomplete bladder emptying.

Nb. The consideration should be greater when more than 1 factor present.

#### 3.5.2 Residual Urine volume

Residual volumes should be measured using disposable in/out catheter or by bladder scan when:

- No urination 6 hours after birth
- More than 6 hours between urination,
- No urination more than 6 hours after catheterisation/removal of catheter.
- Distress caused by an inability to urinate
- Urine volume 150mlsor less and more frequent (less than every 2 hours).
- Incontinent of urine irrespective of whether spontaneously urinating. This could be overflow incontinence. If no significant residual urine then refer to physiotherapist by filling in a referral form located in ward areas.
- Bladder is distended on abdominal palpation.
- Significant abdominal pain.

#### 3.5.3 Trial without Catheter (TWOC) Following Previous Failed Removal of catheter

- After removal of indwelling catheter, check and document the subsequent 3 urine volumes
  - Postunrination residuals should be checked immediately after birthing women/people have voided with a bladder scan. If urine volume is 250mls to 400mls and post urination residuals are <150mls, then Reassurance and discharge can be offered.
  - However, if unable to urinate offer a self-retaining (Foley's) catheter to be inserted for a week, to be maintained at home with a free drainage bag.
- The birthing woman/person is then seen for another trial without catheter.
  - If this is unsuccessful, they can be taught clean intermittent self- catheterisation (ISC) and referred to be reviewed by an urogynaecology nurse (bleep 1863).
  - The ISC clinic runs every Wednesday morning in Outpatients Department, Entrance 2.
  - ----If urogynecology nurse is unavailable the birthing woman/person should be referred to ADAU for obstetric review.



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#### 3.6 Documentation

- Accurate documentation is essential. All staff involved should provide written documentation of actions undertaken.
- Time and volume of all intrapartum voids and first postpartum void.
- Referral to an Obstetric Registrar as appropriate.
- Plan of management.
- Indwelling Catheter inserted/in situ.

# 3.6.1 Commencement of a fluid balance chart post birth for birthing women/people who require:

- an indwelling catheter
- an in / out catheter

#### or have:

- suspected or actual urinary retention
- voiding dysfunction

Document all input and output on the chart and recorded on eCare.

# 4.0 Statement of evidence/references

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#### 5.0 Governance

#### 5.1 Document review history

Version number	Review date	Reviewed by	Changes made
5	28/03/2021	Joseph Nattey/ Kerry Cayley/Erica Puri/ Ed Neal	Complete review

#### **5.2 Consultation History**

Stakeholders Name/Board	Area of Expertise	Date Sent	Date Received	Comments	Endorsed Yes/No
Jayne Plant	Library	03/2021		Provided references	Yes
Maternity Voice Partnership					Yes
Women's health digital document review	Maternity				Yes
Joseph Nattey	O&G urogynae consultant	08/2021			Yes
Anja Johansen- Bibby	Obstetric consultant			Comment on the length of time the indwelling catheter needs to stay in if residual volume is >500mls	Yes



#### 5.3 Audit and monitoring

This Guideline outlines the process for document development will be monitored on an ongoing basis. The centralisation of the process for development of documents will enable the Trust to audit more effectively. The centralisation in recording documents onto a Quality Management database will ensure the process is robust.

Audit/Monitoring Criteria	ΤοοΙ	Audit Lead	Frequency of Audit	Acting on recommendations and lead(s).
<ol> <li>There is documentation of frequency and volume of voiding urine in labour.</li> <li>Fluid balance chart is commenced and completed for all women with an indwelling catheter in-situ.</li> <li>The date, time and volume of the first postpartum urinary void are documented in the notes.</li> <li>There is documented evidence that a TWOC is performed in accordance with local guideline</li> </ol>	This will be performed according to audit plan. Data will be collected using an audit pro- forma (designed by the auditors and approved by the maternity audit leads. The auditors will analyse the data and develop recommendations and action plans from the audit results.	Urogynae Team (Consultant)	Risk meetings – as and when incidents occur, Labour Ward Forum – Monthly, Maternity Governance/CSU Meeting – Quarterly	The O & G risk and governance committee will approve recommendations and action plans to be implemented within a specific time frame. The auditors will implement and monitor action plans with support from the clinical leads, senior midwives and pertinent groups



#### 5.4 Equality Impact Assessment

As part of its development, this Guideline and its impact on equality has been reviewed. The purpose of the assessment is to minimise and if possible remove any disproportionate impact on the grounds of race, gender, disability, age, sexual orientation, religion or belief, pregnancy and maternity, gender reassignment or marriage and civil partnership. No detriment was identified. Equality Impact assessments will show any future actions required to overcome any identified barriers or discriminatory practice.

Equality Impact Assessment									
Division		Women and children					Depa	rtment	Maternity
Person completing the	EqIA	Erica Puri					Conta	ict No.	Ex 87153
Others involved:		Mr E	Ed Nea	l/ Ke	erry Cayle	у	Date	of assessment:	18/07/21
Existing policy/service		Yes					New	oolicy/service	No
Will patients, carers, the public or sta be affected by the policy/service?				iff Yes					
If staff, how many/which groups will affected?			l be	be For example: community midwives, phlebotomists staff					mists, all
Protected characteristic	C		Any ir	mpa	act?	Comme	nts		
Age		NO			0	Positive	ositive impact as the policy aims to		
Disability			NO		recognis	recognise diversity, promote inclusion and			
Gender reassignment				NO		tair treatment for patients and staff			
Marriage and civil partnership			NO						
Pregnancy and maternity			NO						
Race				NO					
Religion or belief				NO					
Sex				NO					
Sexual orientation			NO						
What consultation mether	nod(s) ł	nave	you ca	rrie	d out?				
Emails, teams' meeting	<u>j</u> s								
How are the changes/amendments to the policies/services communicated?									
Emails, teams' meetings									
What future actions need to be taken to overcome any barriers or discrimination?									
What?	Who v	will lead this? Date of c			ompletion		Resources nee	ded	
N/A	N/A	N/A					N/A		
Review date of EqIA 01/04/2025									



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Flow chart 1 – Bladder care after delivery

