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Postpartum Bladder Complications and Recovery

Department of Urogynaecology

Patient Information

Introduction

This leaflet is intended for women who have had a bladder distension episode and/or difficulty passing urine during pregnancy; and during or after delivery and should be used in conjunction with Catheter Care for Women

Difficulty passing urine can be a common problem during the last stages of pregnancy; delivery and in the first day or two following childbirth, but with careful management any symptoms should resolve without long term consequences.

However, for some women who are unable to pass urine or continue to have difficulty passing urine (with or without discomfort), this can result in incomplete bladder emptying or urinary retention (inability to pass urine) and they may need to have a temporary indwelling catheter to allow the bladder to drain. Recent research indicates that approximately 1 in 500 women may have a problem with bladder emptying which lasts longer than 3 days.

What is normal bladder function?

For the bladder to function normally it is reliant on normal anatomy with voluntary and involuntary nerve supply. Your bladder is essentially a muscular bag which acts as a reservoir, storing urine and providing continence. When the bladder fills, nerve impulses or signals are sent via the central nervous system to the brain. These signals are also dependent on the muscles, nerves and sensation in the pelvic floor, perineum, vagina, and

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty.
If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email asp-tr.patient.advice@nhs.net. If you remain concerned, the team can also advise upon how to make a formal complaint.

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It is prudent to be aware that following any future anaesthetic for other types of surgery; whether a general or spinal (although catheters should be used routinely at the time of such procedure) there may also be an unfavorable effect on the bladder.

We hope that this leaflet will provide you with some of the relevant information on your continuing care and is designed as an adjunct to your consultations with your clinician. However, if you have any further questions that are not covered then please do not hesitate to discuss this with your midwife, the birth reflection team, or the Urogynaecology team.

Useful Telephone Numbers

Call a Midwife	**0300 123 5473**
Urogynaecology Department (Monday - Friday excl. BH)	**01932 722124**

rectum. As the bladder becomes fuller, you would normally be able to consciously suppress any bladder urges until you find a suitable, convenient time and place to pass urine and empty your bladder.

What happens to the bladder during pregnancy and childbirth?

There are several changes in pregnancy and circumstances during childbirth that can affect how the bladder will behave after delivery.

Hormonal changes

Normal hormonal changes in pregnancy causes a reduction of muscle tone in the bladder, pelvic floor, vaginal and rectal musculature which continues after delivery and does not totally return to normal until after breast-feeding stops completely. This reduction of muscle tone may mean the bladder does not contract as well as it would normally. Loss of muscle tone to the rectum also leads to an increased risk in constipation which can also directly prevent efficient bladder emptying.

Anatomical changes

As the baby grows in pregnancy, the weight of the baby and the gravid uterus (pregnant womb) also produces anatomical changes affecting the pelvic floor and its organs (e.g., bladder and bowel).

During childbirth it is normal for the pelvic floor muscle and ligaments to stretch to accommodate a safe delivery of the baby. It is thought that this weakening and stretching of ligaments and muscles of the pelvic floor also begins during pregnancy so a caesarian section would not necessarily protect the pelvic floor from this completely.

Over-stretching of the pelvic floor muscles and nerves (including the pudendal nerve which supplies sensation to the perineum) can be common especially during prolonged or difficult childbirth. This damage is usually temporary but may cause some loss in feeling of the pelvic floor muscle, bladder, and bowel. This in turn allows the bladder to fill without the proper signals being sent to the brain. This lack of sensation in bladder filling can result in difficulty passing urine and / or urinary retention during labour and after delivery. Anaesthetics and painkillers (including epidural), intervention at delivery and/or a traumatic delivery can exacerbate the risk of poor sensation and allow the bladder to over-fill without being aware of it.

Fluid changes

During pregnancy, the body produces approximately 50% more blood and body fluids to meet the needs of the developing baby. Swelling is a normal part of pregnancy that is caused by this additional blood and fluid. Normal swelling, which is also called oedema, is experienced in the hands, face, legs, ankles, and feet. This extra retention of fluid is needed to soften the body, which enables it to expand as the baby develops.

What happens after a successful TWOC?

You should be passing urine normally so no further management should be needed. It is imperative to maintain a sensible fluid intake so as not to overload your bladder too quickly once you go home. Your fluid intake should be around 2litres a day and you should **not** need to drink more than 3litres even if you are breast feeding. It is advisable to space your drinks out across the day and avoid an excessive caffeine or alcohol intake.

Avoid being constipated, as a full bowel will increase your risk of incomplete bladder emptying.

If you have had a large bladder distension episode and/or are under the care of Urogynaecology, a follow up appointment is usually made in 6 weeks to review your bladder emptying. You will be asked to complete a 2-3 day fluid diary to bring with you and attend with a comfortably full bladder.

Can this happen again?

It is difficult to predict whether this would happen again in future pregnancies but the risks, previously outlined in this booklet, remain the same. Previous bladder distension episodes should be acknowledged, and bladder management should be emphasized in any subsequent birth-plans. During future pregnancies and deliveries requiring any intervention, such as epidural or caesarean section when a catheter is used routinely, then it may be advisable to leave the catheter in for longer as per the normal protocol to give the bladder a longer period of time to recover.

What happens when the catheter is removed?

When you attend your TWOC appointment the catheter will be removed. It is held in place by a small balloon of water, which is deflated with a small syringe allowing the catheter to be taken out. You will be asked to stay in the hospital to fill your bladder slowly - drinking no more than a small cup (150mls) of fluid every half hour - until your bladder is comfortably full. This slow filling of your bladder is important so as not to overload your bladder too quickly.

When you are ready, the volume you pass will be measured and an abdominal scan or in-out catheter will be performed immediately after you pass urine to assess that you have emptied your bladder sufficiently.

This process may be repeated to check that your bladder is working properly before you are allowed to go home, so be prepared to be in the hospital for at least 4 hours. You are welcome to bring your baby and/or a family member.

Ongoing bladder problems are less common but if you continue to not empty your bladder sufficiently the catheter may be reinserted for a further period of "rest". This again will be very dependent on your circumstances and how well your bladder is functioning.

Indwelling catheters are never used in the long term and in *very* rare circumstances, women who continue to have problems will remain under the Urogynaecology team and are taught self-catheterisation.

Following delivery, the body removes excess fluid accumulated during pregnancy by diuresis (production of urine from the kidneys). In excessive cases, women may excrete up to 3L of fluid per day during the postpartum period. Despite the marked increase in urine formation related to the rapid post-birth fluid shift, the reduced bladder sensation can mask any rapid bladder filling and thus increases the risk of urinary retention.

Who's at risk?

All women are at risk, but the following conditions will increase this risk.

- Having a history of bladder problems
- First-time mothers
- Epidural analgesia
- Delivering a large baby
- Temporary vaginal inflammation (or swelling) after delivery
- Lack of pelvic floor sensation
- Minor lacerations or episiotomy
- Trauma to the perineum (3rd / 4th degree tears)
- Constipation
- Having too higher fluid shift in a short timescale (either by drinking, intravenous infusion, or excessive post-partum diuresis)
- Prolonged labour (especially second stage i.e., when you are pushing)
- Intervention requiring instrumental delivery (i.e., forceps and ventouse) and caesarian section

Is there anything I could have done to prevent the problems emptying my bladder?

Reducing some of the risks outlined above, such as being mindful of your fluid intake and avoiding constipation, will minimize the possibility of bladder problems during pregnancy, delivery and in the postpartum period.

However, some risks are unavoidable to ensure a safe delivery both for you and your baby, and unfortunately, even in low-risk scenarios there is nothing that could have been done differently to stop this happening.

Recognition of the problem and quick intervention will be the key to how your bladder recovers should you not be able to pass urine properly.

How will my bladder be managed?

In very high-risk scenarios (e.g., with epidural and caesarean section under spinal anesthesia) a catheter (flexible tube) is routinely inserted into your bladder via your urethra (water-pipe) to allow the urine to drain until the anesthetic has worn-off and you are mobile.

When you have difficulty passing urine or are in retention either after an initial routine catheter has been removed or this is a subsequent consequence following delivery, a catheter will need to be inserted. This will ease the immediate pressure of the bladder and/or any pain associated if it has been over-distended.

The catheter is then connected to a bag, worn on your leg, to drain the urine away from your bladder.

If the bladder has been overstretched or it is not functioning properly, it is vitally important to "rest" the bladder muscle completely by keeping the bladder empty.

The amount of rest-time (anywhere between 1 and 6 weeks) will depend on the circumstances that have occurred and how much urine was drained when the catheter was first inserted. If we allow your bladder to stay full by not inserting a catheter, then you can be left with permanent damage to your bladder and / or get recurrent urine infections.

What happens next?

You will be allowed to go home with the catheter and the midwife/nurse will arrange any additional supplies and show you how to manage it. You will also be given a leaflet on catheter care.

A TWOC (trial without catheter) appointment will be arranged either in midwifery day assessment unit (MAU) or with the Urogynaecology team so the catheter can be removed.

If you have any problems prior to this date, feel free to call your midwife or the Urogynaecology team during the working week in daytime hours. If it is out of hours, you can call the pregnancy advice line (Call a Midwife) on **0300 123 5473**