



URINARY AND SEXUAL PROBLEMS FOLLOWING PELVIC TRAUMA

Information for patients from the BAUS Section of
Andrology & Genito-Urethral Surgery

The urinary tract in men consists of the kidneys, bladder, urethra (water-pipe) and prostate gland; the penis and testicles are known as the genitalia. In women, the urinary tract consists of the kidneys, bladder and a shorter urethra.

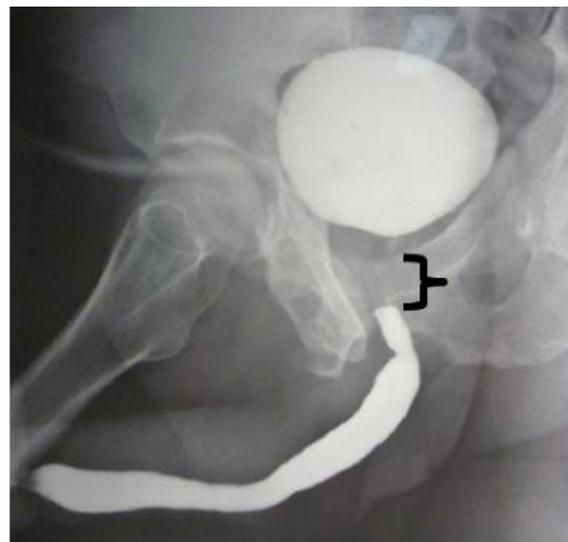
If you sustain a pelvic fracture, you have a 30% (3 out of 10) chance of having an injury to the urinary tract or genitalia as well. This may cause one or more of the following:

- **Urethral stricture** (narrowing of the urethra due to scar tissue formation)
- **Urinary symptoms or incontinence** (involuntary leakage of urine)
- **Erectile dysfunction** (impotence) or ejaculation problems in men
- **Fertility problems** in men
- **Reduced arousal, desire and orgasm** in both women and men.

This leaflet aims to outline how these problems happen, what the symptoms are and what treatment is available so that you know how to access treatment for these conditions.

Urethral strictures

If your urethra has been injured at the time of pelvic trauma, you will have had a catheter (drainage tube) put into your bladder when you were first admitted. This could be in your lower abdomen (in the tummy just below the belly button) or through the urethra (water pipe) itself. However, scar tissue can form in the urethra causing a narrowing or blockage (a stricture, pictured right), even with a catheter in place.



This can make it difficult (or even impossible) for you to pass urine when the catheter is removed. It may happen soon after the injury, but can take a while to develop.

Signs that you may be developing a stricture include:

- a reduced urinary flow,
- infections in your urine,
- blood in your urine,
- changes in how often you pass urine (urinary frequency) or
- difficulty in holding your urine (urinary urgency).

If you do get these symptoms, you will need referral to a urologist; this can be arranged by your GP or local trauma team.

If you cannot pass urine after the injury, it is likely that you will need surgery to remove scar tissue and reconstruct the urethra. This operation is called a **urethroplasty** and is performed only by specialists in urethral surgery. It is usually done after the scarring process has settled, about 12 weeks after the injury. The surgery will allow you to pass urine normally again.

Urinary symptoms and incontinence

If you have an injury to the bladder or to the nerves supplying it, you may develop urinary symptoms such as:

- frequency (passing urine more often),
- urgency (inability to hold your urine for very long),
- incontinence (leakage of urine).

These symptoms often respond well to drug treatment but the tablets may need to be taken for a prolonged period of time.

When there has been an injury to both the urethral sphincter (the muscle valve which keeps you dry) and the bladder neck, you may leak urine when coughing, sneezing or straining (stress incontinence). There is a range of treatments available for this problem, including drugs and surgery.

Erectile dysfunction and ejaculatory problems

Erectile dysfunction (ED), or impotence, is the inability to develop or keep an erection sufficient for sexual intercourse.

Following fractures of the pelvis, the nerves and blood vessels supplying the penis are often damaged; this can cause difficulties with erections as well as other sexual problems. You are more likely to develop impotence after a pelvic fracture if your urethra has been injured; the risk can be up to 40% (four out of 10).

Erectile dysfunction is treatable in most cases. First-line treatment is tablets such as Sildenafil (Viagra), Tadalafil (Cialis), Vardenafil (Levitra) or Avanafil (Spedra). Treatment can be started either by your GP or at clinics specialising in **Andrology** or **Men's Health**.

It is important to try the tablets at maximum dose on at least 8 occasions, before moving on to other treatments. The tablets are only effective when combined with sexual stimulation. Side effects occur in a few men and include headache, flushing, backache and visual disturbances, which are all reversible. These drugs should not be taken if you are using nitrates for angina.



Second-line treatment includes either injecting a drug (prostaglandin) into the penis or using a vacuum erection device (pictured, above right). These techniques are very successful if tablets have failed. They can be explained and demonstrated at your local andrology clinic.

If these treatments do not work, some men require penile prostheses (implants) to restore erectile function. These are surgical implants (pictured right) inserted into the penis when all other treatment options have failed. They are highly effective and have patient satisfaction rates of over 95% (95 out of 100).



Fertility problems in men

You may experience pain, reduced semen volume or loss of ejaculation after a pelvic fracture, as a result of nerve damage or scar tissue formation. This does not mean that there has been damage to sperm production. These problems, however, can be more difficult to treat than erectile dysfunction.

If your ability to ejaculate fails to recover, and you want to have children, sperm can be retrieved from your testicles to use in assisted conception.

Very rarely, there may be an injury to the vas (the tube carrying sperm from the testicles). If this causes a blockage to sperm transport, the blockage can be bypassed or sperm taken directly from the testicles (sperm retrieval) for fertility treatment.

If the testicles have been damaged or lost as a result of the injury, silicone prostheses (implants) can be used to replace them and to improve the cosmetic appearance.

Disorders of arousal, desire and orgasm

Approximately 40% (4 out of 10) of patients will have problems with sexual arousal, desire or orgasm after a pelvic fracture.

There are many possible causes, including:

- anatomical changes
- pain
- nerve-related changes
- associated urinary problems
- psychological reaction (e.g. post-traumatic stress disorder)

The situation may also be made worse by a period of abstinence from sexual activity during your recovery.

Treatment will depend on the exact nature of the problem. It may involve expert help and advice, chronic pain medication, psychological medication or psychosexual counselling.

You can find further information about psychosexual counselling by accessing the [British Association of Sexual and Relationship Therapy](#) or [Relate](#).

Assessing treatment for sexual dysfunction

At each [Major Trauma Centre in the UK](#), the orthopaedic team has close links with urologists familiar with genito-urinary injuries. This means that, if you have sustained a bladder or urethral injury, you can be referred quickly to the appropriate urological centre.

Sexual problems tend to appear after you have been discharged and have recovered from the initial injury. Each Major Trauma Centre has links to a sexual medicine or andrology service. If you are experiencing sexual problems, you can ask your GP or the trauma team for a specialist referral.

Further information

This leaflet links to the joint BAUS & British Orthopaedic Association guideline on the [Audit Standards for the Management of Urological Trauma](#) (contained within the [NICE Guidelines for Complex Fractures](#)).

Please note: we have made every effort to give accurate information in this leaflet, but there may still be errors or omissions. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.