This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.

To view the online version of this leaflet, type the text below into your web browser:
http://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Botox.pdf

**Key Points**

- Botulinum toxin-A bladder injections are performed to treat overactive bladder
- We put several injections of Botulinum toxin-A into the wall of your bladder using a telescope put in through your urethra (waterpipe)
- The injections can sometimes be uncomfortable but the procedure only takes a few minutes
- The procedure is commonly performed in the outpatient clinic under local anaesthetic
- Some patients have difficulty passing urine afterwards and you may need to use a disposable catheter to empty your bladder; this may last for several weeks or months but is rarely permanent
- The commonest after-effect is urine infection
- Botulinum toxin-A injections are usually effective for 4 - 12 months, but the procedure can be repeated at that time

**What does this procedure involve?**

Botulinum toxin-A injections are used to treat overactive bladder (OAB). Patients with OAB have a sudden, strong feeling of needing to pass urine (urgency) and sometimes urine leakage (incontinence) associated with urgency. Usually, patients need to pass urine frequently. The procedure is **not** a treatment for stress urinary incontinence (leakage of urine when you exercise, sneeze or strain).

The procedure involves passing a telescope into your bladder, through your urethra (waterpipe), and giving several injections of Botox (botulinum...
toxin-A) into your bladder wall. Botox prevents your bladder muscle from contracting (squeezing) too much. This should help you to hold on better and will increase the amount of urine your bladder can store.

Currently, there is one licensed product (OnabotulinumtoxinA), with a recommended starting dose of 100U for patients with OAB where there is no obvious cause, and 200U for patients with OAB due to a neurological cause (i.e. interruption or damage to the nerves that go to the bladder from the brain and spinal cord).

**What are the alternatives?**

Overactive bladder can be treated with having an operation. We recommend that all patient try conservative treatments before having an operation because this avoids the risk of side-effects or complications of surgery.

- **Incontinence pads** – if your symptoms are not a bother, you may choose to do nothing and use incontinence pads for urine leakage
- **Conservative measures** – including weight loss, improving fluid intake and reducing caffeine and alcohol
- **Bladder training** – learning techniques to hold on and over-ride your urge to pass urine
- **Medicines** - these may help if conservative treatment does not work

Botulinum toxin-A injections are usually only tried if the treatments are not effective. Other procedures that can be used instead of Botox injections include:

- **Sacral nerve stimulation** – a device implanted in your lower back that sends electrical signals to the bladder nerves
- **Posterior tibial nerve stimulation, PTNS** (electrical stimulation of a nerve near your ankle) can be used, but is not widely available on the NHS
- **Enterocystoplasty** – a major operation that enlarges your bladder using a piece of bowel

**What happens on the day of the procedure?**

You will be seen by the surgeon who will go through the plans for your procedure with you. If you are having a general anaesthetic, an anaesthetist will also see you and will discuss pain relief after the procedure.
Details of the procedure

- we normally use a local anaesthetic gel squirted into your urethra (waterpipe) although, sometimes, a general anaesthetic is needed (i.e. with you asleep)
- we put a telescope into your bladder through your urethra and give a number of injections of Botulinum toxin-A into your bladder wall (pictured above)
- the injections are not usually painful but some patients find them uncomfortable
- you can usually go home shortly after the procedure
- the injections usually work within days but they can take up to two weeks to work

How effective is the procedure in curing overactive bladder?
Botulinum toxin-A injections are effective in over seven out of 10 patients (70%), meaning that their urgency and incontinence are either significantly better or cured. The effects of the injections last for around four to 12 months and then your symptoms start to return. You can have further injections when this happens. There is no limit to how many times you can have injections, and most people find that having repeat injections works well over many years.

Are there any after-effects?
The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon’s advice about the risks and their impact on you as an individual:

<table>
<thead>
<tr>
<th>After-effect</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms return after 4 - 12 months, requiring repeat injections</td>
<td>Almost all patients</td>
</tr>
</tbody>
</table>
What is my risk of a hospital-acquired infection?

Your risk of getting an infection in hospital is between 4 & 6%; this includes getting MRSA or a Clostridium difficile bowel infection. Individual hospitals may have different rates, and the medical staff can tell you the risk for your hospital. You have a higher risk if you have had:

- long-term drainage tubes (e.g. catheters);
- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Incidence</th>
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<tbody>
<tr>
<td>Mild burning on passing urine for 24 hours after the procedure</td>
<td>Almost all patients</td>
</tr>
<tr>
<td>Bleeding in the urine for 1 - 3 days after the procedure</td>
<td>Almost all patients</td>
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<tr>
<td>Failure of the treatment to improve overactive bladder symptoms</td>
<td>Around 3 out of 10 patients (30%)</td>
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<tr>
<td>Difficulty passing urine after the procedure which may require intermittent self-catheterisation (more likely with higher doses)</td>
<td>Between 1 in 5 &amp; 1 in 15 patients (6 - 20%)</td>
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<tr>
<td>Infection of the bladder requiring antibiotic treatment</td>
<td>Between 1 in 6 &amp; 1 in 7 patients (15%)</td>
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<tr>
<td>Recurrent urinary tract infections</td>
<td>Between 1 in 10 &amp; 1 in 50 patients</td>
</tr>
<tr>
<td>Allergic reaction to Botox (with difficulty breathing, swallowing and speaking) requiring emergency treatment</td>
<td>Less than 1 in 250 patients</td>
</tr>
<tr>
<td>Generalised weakness of the legs &amp; arms due to the Botox (usually settles without admission or treatment)</td>
<td>Less than 1 in 250 patients</td>
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</table>
What can I expect when I get home?

- you will be given advice about your recovery at home
- you will be given a copy of your discharge summary and a copy will also be sent to your GP
- if you have had a bladder catheter inserted, we will arrange an appointment for it to be removed
- any other tablets you need will be arranged & dispensed from the hospital pharmacy
- you can return to normal daily life almost immediately
- you may return to work when you are comfortable enough
- if you develop a fever, frequent passage of urine, severe pain on passing urine, inability to pass urine or worsening bleeding, you should seek medical attention.

General information about surgical procedures

Before your procedure

Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (warfarin, aspirin, clopidogrel, rivaroxaban or dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

Questions you may wish to ask

If you wish to learn more about what will happen, you can find a list of suggested questions called "Having An Operation" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home

We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.
We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

**Smoking and surgery**
If you are only having a local anaesthetic, stopping smoking will have no effect on this procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local NHS Smoking Help Online; or
- ring the free NHS Smoking Helpline on 0800 169 0 169.

**Driving after surgery**
It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to contact the DVLA if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

**Pregnancy**
Botulinum toxin-A cannot be used if you are pregnant - or planning a pregnancy - because the side-effects on the unborn foetus are largely unknown.

**What should I do with this information?**
Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

**What sources have we used to prepare this leaflet?**
This leaflet uses information from consensus panels and other evidence-based sources including:

- the Department of Health (England);
- the Cochrane Collaboration; and
- the National Institute for Health and Care Excellence (NICE).

It also follows style guidelines from:

- the Royal National Institute for Blind People (RNIB);
- the Information Standard;
- the Patient Information Forum; and
- the Plain English Campaign.
Disclaimer
We have made every effort to give accurate information but there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

PLEASE NOTE
The staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you do have any questions, you should contact your urologist, specialist nurse or GP.