Botulinum Toxin (Botox) Injections for an Overactive Bladder

Information and advice for patients

Urogynaecology

What are Botulinum Toxin-A injections?

You've probably heard of botox, or botulinum toxin, being used to treat wrinkles, but it can also be used to help people with an overactive bladder. Botox is licensed for being injected into the bladder and it is also recommended by NICE (national institute for clinical excellence) for women who have tried but not had any relief from any other treatments.

What is an overactive bladder?

An overactive bladder is when the bladder contracts suddenly without you having control and when the bladder is not full.

Many common problems are caused by an overactive bladder:

- A sudden urge to go to the toilet (urgency);
- Urge incontinence, a leakage of urine following a sudden strong desire to pass urine.
- Needing to go to the toilet very often (frequency);
- Bladder discomfort
- Getting up several times to go to the toilet during the night (nocturia);
- Wetting the bed (nocturnal enuresis).

Using botulinum toxin-A to treat an overactive bladder

Botox can be injected into the bladder wall to lessen the contractions of the bladder. It works by blocking the release of acetylcholine (a chemical which makes the bladder contract).

You will have had urodynamic investigations (bladder pressure tests) to confirm that your bladder is overactive and already tried tablets and bladder training treatments. If these treatments have not worked or you have been unable to tolerate the side effects of the tablets, Botox may be offered to you. Treatments do have to be repeated as the effects wear off over time, but many people are turning to Botox instead of undergoing major surgery.

What are the benefits?

Botox has been successful in treating overactive bladder syndrome. It temporarily paralyses the injected muscles, improving and sometimes resolving the symptoms altogether.

The procedure is minimally invasive (no incision is needed) and you can usually be treated as a day case.

Botulinum Toxin (Botox) Injections for an Overactive Bladder

Information and advice for patients

Urogynaecology

The beneficial effects are usually seen 3-4 days after the injection and normally last 9-12 months or longer. If your symptoms have improved with botulinum toxin-A you will be offered further injections when the effects have worn off.

What are the risks?

The use of botox is very safe, but there are a few risks you need to be aware of:

Treatment working too well:

In 1 in 10 patients the treatment can work so well that you may have difficulty emptying the bladder completely. If this happens you may have to insert a catheter (small tube) through the urethra and into the bladder to empty it.

You will be taught how to do this before the procedure can take place and may need to do this until the effects of the Botulinum toxin-A wear off. If you are unable to do this the treatment will not be suitable for you.

Symptoms not improving:

Around 3 out of 10 (30%) patients do not see an improvement of symptoms (Baus 2017)

Infection:

Between 1 in 6 and 1 in 7 patients develop a urine infection after the procedure which may require antibiotics. (Baus 2017).

Side effects

You may also experience the following side-effects for a few days after the injections. These are normal but if you are concerned at all please contact your doctor.

- Some blood in your urine.
- Mild burning on passing urine.
- Headache or light-headedness
- Abdominal pain and/or diarrhoea.
- Very occasionally patients may experience flu-like symptoms during the first week.

As botox has only been used for the past 4-5 years to treat urological disorders, the effects of its long-term use are not known. In research trials patients have been given up to 7 repeated injections. However it has been used for the past 20 years in other situations such as muscle injections, where no long-term side effects have been reported.

Botulinum Toxin (Botox) Injections for an Overactive Bladder

Information and advice for patients

Urogynaecology

Some medications may stop botox working and so it is important that you let us know what tablets you are taking. Common ones that affect botox in this way are Nifedipine, Amlodipine, Verapamil and Diltiazem.

Who would the treatment not be suitable for?

It is important to let us know if any of the following conditions apply to you, as it is not safe to have Botulinum toxin-A if:

- you are pregnant
- you are allergic to albumin (egg)
- you have Myasthenia Gravis, Eaton Lambert syndrome or Amyotrophic lateral sclerosis

Are there any alternative treatments?

You will have already tried medication, bladder training and pelvic floor exercises. Further alternatives are:

- Medication given directly into the bladder through a catheter
- **Sacral nerve stimulation** inserting an implant into the bladder to help it contract more evenly and normally.
- **Cysto-distension** a surgical procedure carried out to increase the amount of urine that the bladder can hold.
- **Clam-cystoplasty** a major operation which aims to increase the capacity of the bladder by sewing bowel tissue to the top part of the bladder.
- **Percutaneous tibial nerve stimulation (PTNS)** fine needle electrode is inserted into the lower, inner aspect of the leg sending stimulation through the tibial nerve improving the number of times you need to pass urine.
- **Urinary diversion** a major operation which involves redirecting the flow of urine from the kidneys usually to a stoma on the outside of the abdomen.

If you would like to know more about these alternatives please speak to your doctor.

Preparing to have the injections

If you are having a local anaesthetic, no special preparation is required. If you have a general anaesthetic, you should not have anything to eat or drink for 6 hours before the operation. If you would normally take tablets during this time, please ask at the pre-operative assessment clinic which you should continue to take.

Botulinum Toxin (Botox) Injections for an Overactive Bladder

Information and advice for patients

Urogynaecology

When you arrive on the ward

The anaesthetist will visit you on the ward to discuss the anaesthetic and the risks involved. You will have routine observations taken, including blood pressure, pulse and temperature. Before going to the operating theatre, you will be asked to change into a theatre gown. Any make-up, nail varnish, jewellery (except your wedding ring), dentures and contact lenses must be removed.

Having the injections

The procedure is usually done under local anaesthetic (where you are awake) or general anaesthetic (when you are put to sleep).

- 1. Your bladder will be drained.
- 2. A cystoscope (instrument used to see inside the bladder) is passed into your bladder through the urethra (tube you pass urine through).
- 3. A needle is passed through the cystoscope.
- 4. The botox is then injected through this needle into several specific sites in the bladder.

After the injections

The nurses looking after you will monitor you closely when you return to the ward, and will take observations such as pulse and blood pressure. If you experience any pain or discomfort, please ask the nursing staff for painkillers.

You will be able to eat and drink as soon as you feel up to it and will be encouraged to move around the ward as soon as possible, to prevent complications such as deep vein thrombosis (blood clot in the leg).

Going home

You can usually go home on the day of the operation, or the next day. The ward nurses will check how you are passing urine and do bladder scans before you go home.

You should arrange for a responsible adult to collect you from hospital and take you home. If you have had a general anaesthetic you should have someone with you for the next 24 hours.

This is a day case procedure and you will be able to go home on the same day. The procedure can be carried out either in theatre or in the out patients department in our Gynecology specialty procedure suite located at Sandwell General Hospital.

Botulinum Toxin (Botox) Injections for an Overactive Bladder

Information and advice for patients

Urogynaecology

Botox procedure is most commonly carried out under local anaesthetic and a local anaesthetic gel is used to numb the area while you are awake. However, sometimes Botox is injected while you are asleep under general anaesthetic. If you are having the procedure carried out under general anesthetic you will be seen by the pre-assessment nurse to discuss how you will need to prepare for the anesthetic and recovery. The anaesthetist will also be able to talk to you about the risk of having an anaesthetic.

If you need to perform self-catheterisation, you will be given a small supply of equipment and information on how to obtain more supplies from your GP. You may be referred to a Specialist Urogynaecology Nurse who will check on your progress and technique.

Follow-up

If you need a follow-up appointment, it will be made and posted to you.

If you experience any of the following problems after discharge from hospital, please go to accident and emergency:

- Unable to pass urine
- Severe burning sensation while passing urine
- Increased temperature

Useful websites

Bladder and Bowel Foundation www.bladderandbowelfoundation.org

Sandwell and West Birmingham Hospitals www.swbh.nhs.uk

Further Information

For further information, please contact: Miss Cheung / Mrs Monica Quinlan Consultant Gynaecologist Secretary: 0121 507 4706

Botulinum Toxin (Botox) Injections for an Overactive Bladder

Information and advice for patients

Urogynaecology

Sources used for information in this leaflet

- National Institute for Health and Care Excellence (2019). Urinary incontinence and pelvic organ prolapse in women: management [NICE guideline 123]. [Online]. London: NICE. Available at: https://www.nice.org.uk/guidance/ng123 [Accessed 29th July 2019].
- British Association of Urological Surgeons (BAUS) Limited (2017) Botulinum Toxin-A (BOTOX) injections into the bladder wall: information about your proceedure from the British Association of Urological Surgeons (BAUS). London: BAUS. Leaflet No: 16/003

If you would like to suggest any amendments or improvements to this leaflet please contact SWB Library Services on ext 3587 or email *swbh.library@nhs.net*.



A Teaching Trust of The University of Birmingham Incorporating City, Sandwell and Rowley Regis Hospitals © Sandwell and West Birmingham Hospitals NHS Trust ML3125 Issue Date: May 2020 Review Date: May 2023