

Botulinum Toxin A (BOTOX) for Overactive Bladder and Neurogenic Detrusor Overactivity

Gynaecology

Introduction

This leaflet aims to provide information for patients considering the use of Botulinum toxin A (Botox) to treat urinary symptoms. It will also include the benefits, risks and alternatives. If this leaflet does not answer all your questions please do not hesitate to ask a member of our team for further information.

Throughout this leaflet Botulinum Toxin A will be referred to as Botox

What is Botox?

Botox is a modified toxin made from a bacterium. Its use has been standardised in a variety of disorders in medicine including some urological conditions. Its medical use was started in the 1960's. It has been used for urological disorders since the 1990's.

Botulinum Toxin A is a treatment for urge urinary incontinence caused by neurological conditions. A variety of neurological diseases and disorders, including multiple sclerosis, Parkinson's disease, spinal cord injury, stroke, spina bifida, and hydrocephalus (abnormal accumulation of fluid in the brain) can cause problems with bladder control. There are also some individuals who do not have a neurological disease or injury but cannot empty their bladder or experience leakage due to abnormal nerve signals to the bladder. This is known as a neurogenic bladder. Botox is also used in women with overactive bladder where no cause for the symptoms has been found.

How does a normal bladder work?

The bladder is similar to a balloon. As urine is produced and fills the bladder up, the walls stretch to accommodate the extra fluid. Urine is kept inside the bladder by a valve-like mechanism ("urethral sphincter") that stays shut until you feel the need to empty and have reached a toilet. The valve mechanism is assisted by the pelvic floor muscles below the bladder, which tense up when you cough or sneeze and keep the urine in. As the bladder fills up, you start to be aware of the feeling that you need to pass urine, but are able to hold on. Once you have decided to empty your bladder (in a toilet, at a convenient time), your brain signals the muscle of the bladder to squeeze and empty out the urine. At the same time, the bladder valve and pelvic floor muscles relax to allow the urine to flow out. The bladder usually needs to be emptied about 4-7 times per day, and once at night.

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

Normal bladder half full, and relaxed



Overactive bladder half full and contracting and leaking



What is an overactive bladder (OAB)?

OAB symptoms are caused by the bladder muscle squeezing to empty out urine inappropriately even when the bladder isn't full. This often happens without warning, and when you do not want it to, for example when hearing the sound of running water, putting the key into the latch.

Neurogenic Detrusor Overactivity (NDO)

When the spinal cord is damaged for example following spinal injury or as a result of multiple sclerosis the signals between the brain and bladder no longer work as they should. The nerves may tell the bladder to contract too frequently resulting in urinary urgency and frequency. Both OAB and NDO cause the following symptoms:

- A sudden feeling you need to pass urine urgently
- The bladder leaking at times when you have an urgent desire to pass urine
- The need to go to the toilet often even if the bladder isn't full
- The need to get up to the toilet at night more than twice

Patients with neurological conditions may have urge incontinence but may also experience difficulty emptying the bladder due to failure of the urethral sphincter muscle to relax and so release urine from the bladder.

What is Botulinum Toxin A and how does it work?

Many people have heard of Botox or Dysport for the treatment of frown lines; these are the drug company names for Botulinum Toxin Type A (BOTA). BOTA is protein extracted from bacteria, under controlled laboratory conditions, in much the same way as penicillin is produced from mould.

BOTA works for the bladder by relaxing the muscle of the bladder wall (the detrusor muscle) reducing urinary urgency and incontinence. Following treatment the toxins' effects last for several months after which, the muscles return to their normal strength (between 3 to 9 months, occasionally longer).

Am I a candidate for Botox?

You may be a candidate for Botox treatment if you have an overactive bladder and have tried treatments such as physical therapy and medications without success or if you have Neurogenic Detrusor Overactivity. Prior to offering Botox, your doctor may perform investigations such as urodynamics (a bladder test) to confirm your diagnosis and a urine test to check that you do not have a urinary tract infection. BOTA is NOT effective for the treatment of another common type of urine leakage called stress incontinence (leakage with cough, sneeze, and exercise).

Who should not have Botox?

You should not receive Botox treatments if you have any of the following:

- Myasthenia gravis or Eaton-Lambert Syndrome
- An active or untreated bladder infection
- Pregnancy (effects on foetus are unknown)
- Known allergy to Botulinum Toxin A

What happens about consent?

We must seek your consent for any procedure or treatment beforehand. Your doctor will explain the risks, benefits and alternatives, where relevant, before they ask for your consent. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.

How successful is Botox treatment?

Botox is used successfully to treat over activity of the bladder muscle (detrusor over activity) which is one of the common causes of urinary incontinence. There is a 60% to 90% chance of achieving significant improvement in urinary urgency and urge leakage following Botox injections and a reduction in urinary frequency. Most women require repeat doses of Botox whilst others find significant long term improvement after a single dose.

What are the risks of Botox treatment?

You may see some blood in the urine initially after the procedure. Significant bleeding is extremely rare but if this occurs you should contact either your GP or The Ward on 01902 694034.

You can also contact the Gynaecology Assessment Unit on 01902 694606 Monday - Friday 08.30 - 16.30 Saturday 08.30 - 13.00

Urinary tract infection is reported in a small number of cases but this can be easily treated with antibiotics.

For patients who are given 100 units of Botox there is about a 6% chance of them needing to self-catheterise. For those patients who have 200 units of Botox there is a 20 – 30 % chance of needing to self –catheterise. Your doctor will discuss the dose with you beforehand.

You may experience passing small amounts of blood in the urine and occasionally flu like symptoms in the first week after the Botox.

Other very rare risks include; Allergic reaction, including anaphylaxis; Erythema multiforme (a severe skin rash); and, generalised weakness.

You should consult your doctor if you experience any of the above problems for advice.

Are there any alternatives?

You will have been offered and tried conservative measures, including fluid advice, pelvic floor muscle training, smoking cessation as well as weight loss, before being offered Botox injection. It is difficult to predict what will happen to your bladder, or if you have an injection, how long the effects will last. You should have the injection only if your symptoms are badly affecting your quality of life.

Do nothing

If the leakage is only very minimal and is not distressing, then treatment is not necessarily needed.

Pelvic Floor Exercises

You should have already completed a course of pelvic floor exercises before being offered Botox injection. This is usually a structured programme of exercises for three to six months provided by the physiotherapist. Pelvic floor exercises can strengthen the pelvic floor and correct or reduce stress incontinence. They are the most effective non-surgical treatment for stress urinary incontinence.

Bladder training

Bladder training (also called bladder drills, bladder retraining or bladder re-education) may help the problem. The aim is to slowly stretch your bladder so that it can hold a large volume of urine. With time the bladder muscle should become less overactive and you should become more in control of your bladder. The doctor or the continence advisor will explain how to do bladder retraining.

Medications

Most probably your doctor has already tried some medications to relax your bladder. There are two types of medication available - anticholinergics and mirabegron. They work by relaxing the bladder so it can hold more urine. Therefore you will go to the toilet less often; you will have fewer urine leaks and less urgency.

Sacral nerve stimulation

A device implanted in your lower back that sends electrical signals to the bladder nerves.

Enterocystoplasty

A major operation that enlarges your bladder using a piece of bowel.

Absorbent Products

Incontinence pads or pants may provide extra ways of managing urinary problems for some women.

The choice about which treatment is best for you will be made together with your doctor based on the risks and benefits of the treatment and individual circumstances.

What happens on my admission to hospital?

You are usually admitted to hospital on the day of surgery but admission times vary. You will be informed by letter as to what time you should arrive.

What will happen on the day of surgery?

You will not be able to eat or drink for a specified time prior to your procedure. Your letter detailing your admission date and time will also advise you of this.

It is important to have a bath or shower on the day of your procedure before you come in to the hospital. Please ensure that any nail polish is removed from finger and toe nails and false nails. Also after your shower or bath do not apply any body cream, make up or deodorant to your skin.

All jewellery must be removed other than a wedding ring. This can be left on and taped over prior to your surgery.

Most patients will walk to theatre accompanied by one of our team.

Once you are in the small room just outside the operating theatre, if you are having a general anaesthetic, this will be given usually started by an injection in the back of your hand.

You may also have a mask placed over your nose and mouth. You will not remember anything following the injection until you wake up in the recovery room.

In some circumstances a general anaesthetic is not given and an alternative (epidural or spinal anaesthetic) is used instead. The anaesthetist will discuss this with you more fully if required.

If the procedure is performed under general anaesthesia, you will usually be discharged home the same day as your procedure, after passing urine. It is advisable that you are taken home by car or taxi and that a responsible adult stays with you overnight. It is recommended that for 24 hours following a general anaesthetic you do not:

- Ride a bike
- Drive a car
- Operate machinery
- Smoke, drink alcohol or use recreational drugs
- Sign important documents

A discharge notification will be sent to your G.P.

If you require any medication to take home, this will either be given to you prior to discharge or if you are going home after Pharmacy has closed, arrangements will be made for you to collect it the following day. Pain killers are not provided for you to take home from hospital; you are advised to get something such as Paracetamol ready for discharge just in case you require them once you get home.

Generally the recommended time off work following this is up to a week. However, this can vary depending on personal circumstances and you should discuss your personal situation with your nurse. A Medical certificate can be issued by the Doctor on the ward or your GP, or you can complete a Self Certification which you can obtain via your GP practice or download a copy from "<http://www.hmrc.gov.uk>" www.hmrc.gov.uk.

How should I prepare for this procedure?

This procedure can be done in the out-patient clinic under a local anaesthetic (although currently we are only offering as an inpatient procedure) or as a day case under local or general anaesthesia.

If the procedure is done under local anaesthesia, you will be awake the whole time. In the Day Surgery Centre, the procedure can be done under a general anaesthetic or sedation. This means you will be asleep during the procedure. If you have a general anaesthetic we will ask you to come to a pre-assessment clinic for tests before your admission to ensure you are fit and well for surgery. This may include blood tests, heart trace or chest X-ray.

You need to stop taking some medications, such as warfarin and clopidogrel, several days before you have the Botox injections. We will discuss this with you before the day of your procedure.

How long does the procedure take?

It takes about 15 minutes, from putting the cystoscope into your bladder, giving you the injections and then taking the cystoscope out again.

What happens during the procedure?

Your doctor will put a small amount of local anaesthetic jelly into your urethra to numb the area so you do not feel any pain. This may sting a little for a short time.

They will then gently pass the cystoscope into your bladder.

Your bladder will be filled with water through the cystoscope; this may make you feel like you want to go to the toilet. Sometimes water leaks around the cystoscope. This is normal and the doctors and nurses expect it to happen.

Your doctor will pass a small needle down the cystoscope and give you between 10 and 20 botulinum toxin injections into your bladder. They will then take out the cystoscope.

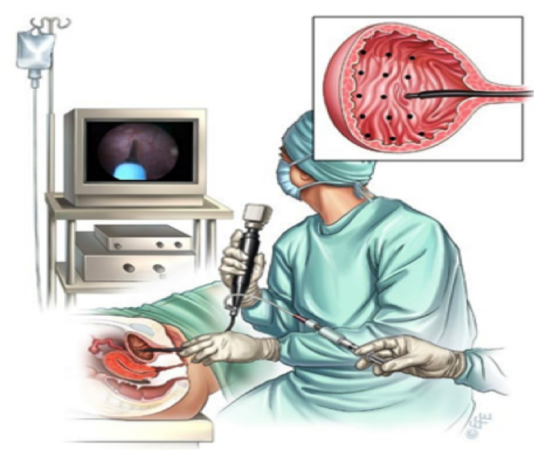
Will I feel any pain?

If the procedure is done under local anaesthesia it can be uncomfortable but it should not be painful. The injections into the wall of your bladder may sting for a few seconds. You will be able to speak to the doctor and nurse during the procedure and ask them to stop if it becomes too painful. Most people feel no pain afterwards.

What happens after the procedure?

If the procedure is performed under local anaesthesia you will be able to get up straight away and go to the toilet to empty the water put into your bladder during the procedure.

We will ask you to wait for about one hour before you can go home. You should be fine to drive, but please wait until any discomfort from the procedure has gone. You do not need to take any special precautions and you can continue your daily activities as normal. Please watch for signs of an infection and seek medical advice if you are concerned.



If you have any concerns regarding your operation once you have been discharged please contact your own GP, Ward D7, 24 hours a day, on 01902 694034 or Urogynae Specialist Nurse, office hours, on 01902 695186 for advice.

It is advisable to drink a little extra fluid for a couple of days to reduce the risk of urine infection; your doctor may also give you a dose or short course of antibiotics to take following treatment.

What should I expect after treatment with Botox?

You may experience some stinging or burning while passing urine for the first few times following treatment. Your urine may also be a little blood stained. This is normal and will clear over 24-48 hours. Botox DOES NOT work immediately but over several days to 2 weeks, you should begin to experience relief of sudden urges to urinate, and a reduction in urine leakage or stop leaking altogether. Your bladder should be able to hold more urine thus reducing the number of times you go to the bathroom.

If you are taking medications by mouth to relax the bladder, you should be able to wean yourself off of these once the Botox treatment begins to take effect. Your doctor will advise you about this.

Associated with this relief in symptoms, you may also notice that it becomes more difficult to empty your bladder. This is because Botox works by relaxing the muscle of the bladder, which can reduce its ability to contract and empty. If you are unable to empty your bladder completely your doctor or nurse will teach you clean intermittent self-catheterisation (CISC).

This involves passing a tiny tube into the bladder up to 3 to 4 times a day to empty it. This is a simple and safe procedure. Don't worry, once the effect of the Botox wears off your bladder function will return.

How long does the treatment effect last?

Eventually, the effect of the Botox will begin to wear off, and you may notice a gradual return of symptoms of frequent and urgent urination, as well as leakage episodes. As every situation is different, it is impossible to predict how long after your treatment this will happen; however, the treatment effect will commonly last 6 months to 9 months. For some women, a single treatment is all that is required; others need repeated treatments.

Will I need a follow up appointment?

We will need to see you at the specialist nurse clinic to check if you are emptying your bladder satisfactorily 2 -3 weeks following the procedure. This appointment will automatically be sent out to you.

Contact details

Prior to your Botox injection if you have any questions or worries you may contact your GP for advice or contact the Urogynaecology Nurse Specialist on 01902 695186 Monday - Friday, 9 - 4 pm.

Useful support advice and literature is available:

PALS (patient advice and liaison service)

01902 695362

HNSDirect

08454647

Bladder & Bowel Foundation

SATRA Innovation Park

Rockingham Road

Kettering

Northants

NN16 9JH

Nurse helpline for medical advice

0845 345 0165

Counsellor helpline

0870 770 3246

General enquiries

01536 533255 Fax: 01536 533240

email: info@bladderandbowelfoundation.org

Websites

www.Womenshealthlondon.org.uk

www.bladderandbowelfoundation.org

www.nice.org.uk/nicemedia/pdf/word/CG40publicinfo.doc

www.continet.org.sg (International Continence Society)

<http://incontinet.com> (Resource on Continence)

www.bupa.co.uk

www.rcog.org.uk

www.noce.org.uk

www.nhsdirect.nhs.uk

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。