

TREATMENT OF AN OVERACTIVE BLADDER USING INJECTIONS OF BOTULINUM TOXIN INTO THE BLADDER

INFORMATION FOR PATIENTS

WHAT IS AN OVERACTIVE BLADDER?

An overactive bladder squeezes when you don't want it to. This can cause symptoms such as urinary frequency or urgency. If you don't get to the toilet quickly enough it can also cause urge incontinence. Some patients find that their bladder wakes them up several times per night causing a symptom known as nocturia. In most cases it is possible to show that the bladder is overactive using a special bladder test called urodynamic studies.

WHAT TREATMENT OPTIONS ARE AVAILABLE?

1. Fluid modification. Sometimes patients drink a lot of tea, coffee or caffeinated drinks which may irritate the bladder and make the symptoms of frequency or urgency worse. It is often useful to complete a bladder diary so that we can accurately record how much fluid is taken in during the day, the number of times a patient goes to the toilet and the amount passed each time. Using this information, some women are asked to drink a little more (if they are not drinking enough then the urine can become very concentrated and this may irritate the bladder) or, alternatively, reduce their fluid intake because if they are drinking too much, this may make them go to the toilet even more often.
2. Bladder retraining. Many patients have got into the habit of doing to the toilet "just in case" because they are worried about developing urgency and leaking. Over time this means that the bladder will hold less and less so making the symptoms of an overactive bladder worse. Bladder retraining is used to try and gradually increase the time between visits to the toilet so that eventually the bladder holds more urine and patients gain greater control.
3. Physiotherapy. Many patients find that pelvic floor exercises, often under the supervision of a physiotherapist, can improve bladder control. As well as strengthening muscles, the physiotherapist will teach some distraction techniques, (e.g.) thinking of work or holiday while you have a strong desire to go to the toilet can make this sensation disappear over 30 seconds or so, and then you can calmly walk to the lavatory.
4. Medication. Many tablets are available to try and calm the bladder and stop it squeezing when it shouldn't. A patch can also now be used. Approximately 60-70% of patients will gain some improvement with the medication. Unfortunately, it has to be used long term and some patients can develop side effects such as dry mouth or constipation.
5. Bladder Botulinum toxin injections. Botulinum toxin is not yet licensed for use within the bladder. However, in recent years physicians in both America and Europe have reported its successful use in the treatment of bladder overactivity, which is one of the commonest causes troublesome symptoms of urgency, frequency and urinary incontinence.

WHAT IS BOTULINUM TOXIN?

Botulinum Toxin is a neurotoxin which has been safely used for the past 20 years to control various muscular disorders. It is licensed for use in treating muscle spasms and excessive sweating. Many patients will know that it is sometimes used in cosmetic surgery to prevent frowning. You may be aware of the fact that Botulinum Toxin is not yet licensed for use in the bladder, although it has been used successfully in many patients over the last few years. Not all patients with an overactive bladder have improved but, so far, it doesn't seem to have made bladder overactivity worse.

HOW DOES BOTULINUM TOXIN WORK?

The exact way that Botulinum Toxin works is still unclear but it appears to prevent some of the nerves controlling the bladder from working. There are many thousands of nerves in the bladder and as the treatment involves 15-20 injections only into the bladder muscle, clearly not all of them are affected. This means that hopefully the bladder will continue to squeeze when you want it to (at the time when you want to go to the toilet) but it won't squeeze when it shouldn't (the frequency, urgency, incontinence and nocturia may be improved).

HOW IS THE TREATMENT PERFORMED?

Approximately 15-20 injections of Botulinum Toxin are given into the bladder under a short general anaesthetic lasting approximately ten minutes. You should be able to go home the same day.

WILL I NOTICE THE DIFFERENCE IMMEDIATELY?

The treatment is successful in approximately 80% of patients. Although some women will notice the difference straight away, many find it is not until 1-2 weeks after the treatment they start to improve.

HOW LONG IS THE TREATMENT EFFECTIVE FOR?

Most patients find their symptoms start to return after approximately six to nine months. Further injections may be given at this time or, alternatively, other treatments are considered.

WHAT ARE THE RISKS AND SIDE EFFECTS?

There is always a small risk associated with any operation. Having a general anaesthetic is very safe. To give injections a cystoscopy is performed which involves passing a small camera into the bladder. Antibiotics are given at the time of the procedure and for two days afterwards but there is always a small risk of infection. Some patients have a little blood in the water for a couple of days.

The main risk which you must be aware of is that 10-20% of patients will have some difficulty emptying their bladder after the procedure. This is because Botulinum Toxin may temporarily reduce the ability of the bladder to contract when you go to the toilet. This means that you must be willing and able to perform self catheterisation if this happens. If you are not able to perform self catheterisation, then bladder Botulinum toxin injections is not a treatment suitable for you. Fortunately the bladder does regain its ability to empty over time so it is extremely unlikely that you will need to perform self catheterisation long term.

Botulinum Toxin is a very safe product but as with any drug there may be other side effects. Approximately 1% of patients have complained of a rash, a transient flu-like illness or drowsiness. There have been three reported cases of weakness of both arms in the World Literature following treatment but this is obviously very rare (< 1:1000) considering the enormous number of patients receiving this medication. As with all new types of treatment, there may be unforeseen side effects but we don't expect you to suffer any major health problems.

WHAT HAPPENS AFTER THE TREATMENT?

A urinary catheter is normally left in the bladder for approximately two hours after the injections have been given. It is then removed and you should be able to go home the same day. In view of the general anaesthetic, you shouldn't really drive for 24 hours after the procedure as you may still feel a little drowsy. Otherwise the recovery is very quick and you should be able to resume almost all normal activities

immediately. We advise you to drink plenty of fluids after the procedure. You will be seen back in the Clinic a few weeks after the injections to assess your response to the treatment.

ARE THERE ANY ALTERNATIVES?

Before being considered for bladder Botulinum toxin injections you should already have tried fluid modification, bladder retraining, pelvic floor exercises and medication. If you are not suitable for bladder Botulinum toxin injections then the alternatives are to either consider having neuro modulation (which involves having a pace maker-like device attached to the nerves which control the bladder) or major bladder surgery. Further details are available on request.

ANY OTHER QUESTIONS?

If you would like any more information then please don't hesitate to ask Mr Hextall or Jackie Walker Urogynaecology nurse specialist.

Andrew Hextall MD FRCOG – December 2010