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Second-line Treatment for OAB

The underlined terms are listed in the glossary.

Sometimes the drugs your doctor prescribed do not improve your overactive bladder symptoms (OAB). In these cases, other treatment options are available. Together with your doctor you can decide which approach is best for you.

This section offers general information about second-line treatment for OAB symptoms and situations can vary from country to country.

Common treatment options for OAB symptoms are:

- Botulinum toxin bladder injection
- Nerve stimulation, also known as neuromodulation
- Surgery to increase bladder volume

Botulinum toxin

Botulinum toxin is widely known by one of its trade names, Botox® and is often used in cosmetic surgery.

For OAB symptoms, the toxin is injected into the bladder wall to reduce the activity of the nerves which cause the symptoms. This treatment may improve urgency, frequency of urinating, and urgency incontinence.

For botulinum toxin injections, you will generally receive local anaesthesia. Sometimes other forms of

Interesting Fact

In the early days, the doctor had to look directly into the endoscope to see the bladder. Nowadays, the camera projects a magnified image onto the video monitor in front of the doctor. Because of high-definition technology, the doctor can see even the smallest details.

anaesthesia are used. The doctor uses a type of endoscope, known as a cystoscope, to enter your bladder through the urethra. The cystoscope has a small camera to show a high-quality image of your bladder on a video monitor. The doctor injects a small dose of botulinum toxin into different areas of your bladder wall (**Fig. 1**).

The effect of the procedure will wear off with time and after 4-9 months you will need to undergo repeat treatment. Some people (less than 10%) may have difficulty urinating after a botulinum toxin injection, and may need a catheter. Catheters may increase the risk of urinary tract infection and your doctor may prescribe antibiotics.

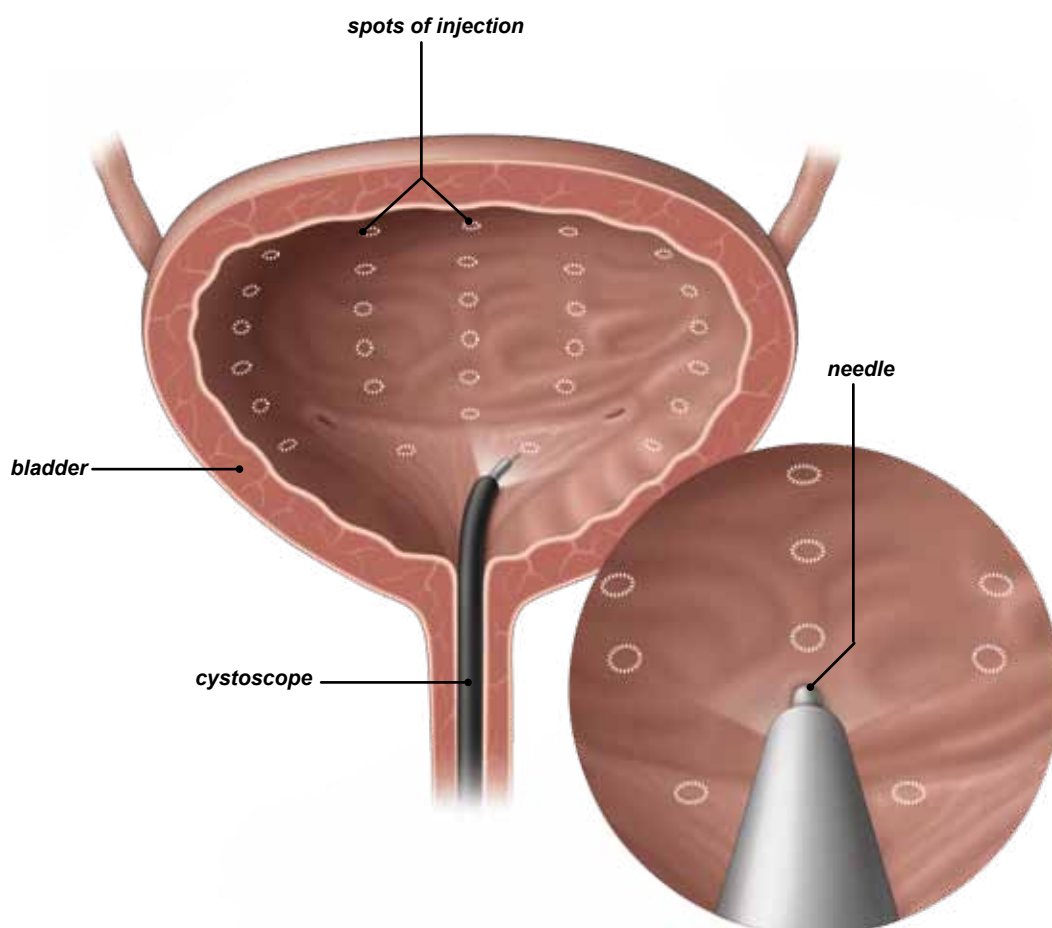


Fig. 1: Botulinum toxin is injected into the bladder wall.

Nerve stimulation

Nerve stimulation, also known as neuromodulation, is a treatment which uses electrical pulses to stimulate the sacral nerves, which control the bladder. There are two types of nerve stimulation:

- Tibial nerve stimulation uses a needle at the level of the ankle (**Fig 2**)
- In sacral nerve stimulation a device is implanted in your lower back (**Fig 3**)

Tibial nerve stimulation

For tibial nerve stimulation, your doctor will place a needle with electric current near your ankle. The needle passes through the skin and stimulates the tibial nerve, which runs from the inner part of the ankle along the leg up to the sacral nerves (**Fig. 2**).

A treatment course for tibial nerve stimulation generally lasts 12 sessions. A treatment session is done once a week at a clinic and usually lasts 30 minutes. The effect will wear off with time and you will likely need more treatment courses.

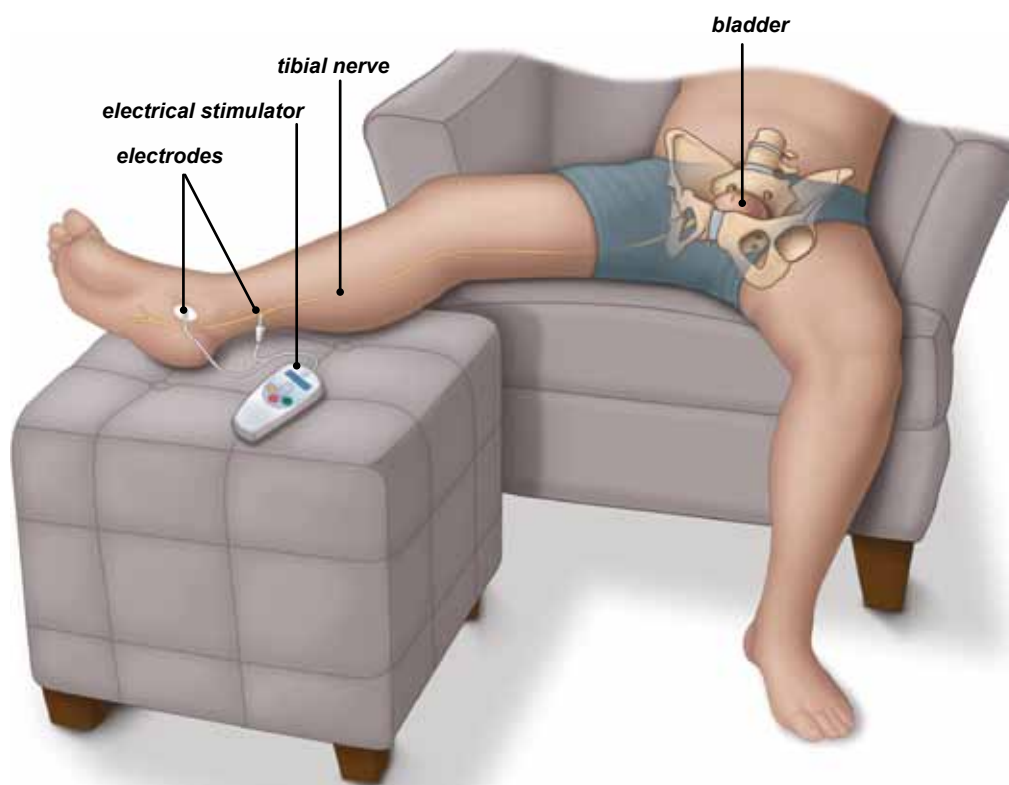


Fig. 2: Tibial nerve stimulation.

Sacral nerve stimulation

The sacral nerve stimulation procedure is done in two stages. First, the doctor places an electrode through the skin and tests whether or not your OAB symptoms respond to nerve stimulation. If there is a response, you will receive surgery to implant a programmable pulse generator above your pelvic bone. The electrode connects the generator to the area of stimulation of the sacral nerves (**Fig. 3**). After the surgery, you will be able to control the generator with a device outside the body. This device will control the electrical stimulation on the nerves that reach the bladder. When you alter the stimulation to the nerve, this reduces bladder over-activity. Sacral nerve stimulation can greatly improve your symptoms.

After surgery there is a risk of infection and you may experience pain in the area of implantation. Over time, the generator or the electrode may move, causing discomfort. It is also possible that the generator battery fails. If this happens you will need further surgery to replace the battery. Make sure to discuss any of your concerns about these risks with your doctor.

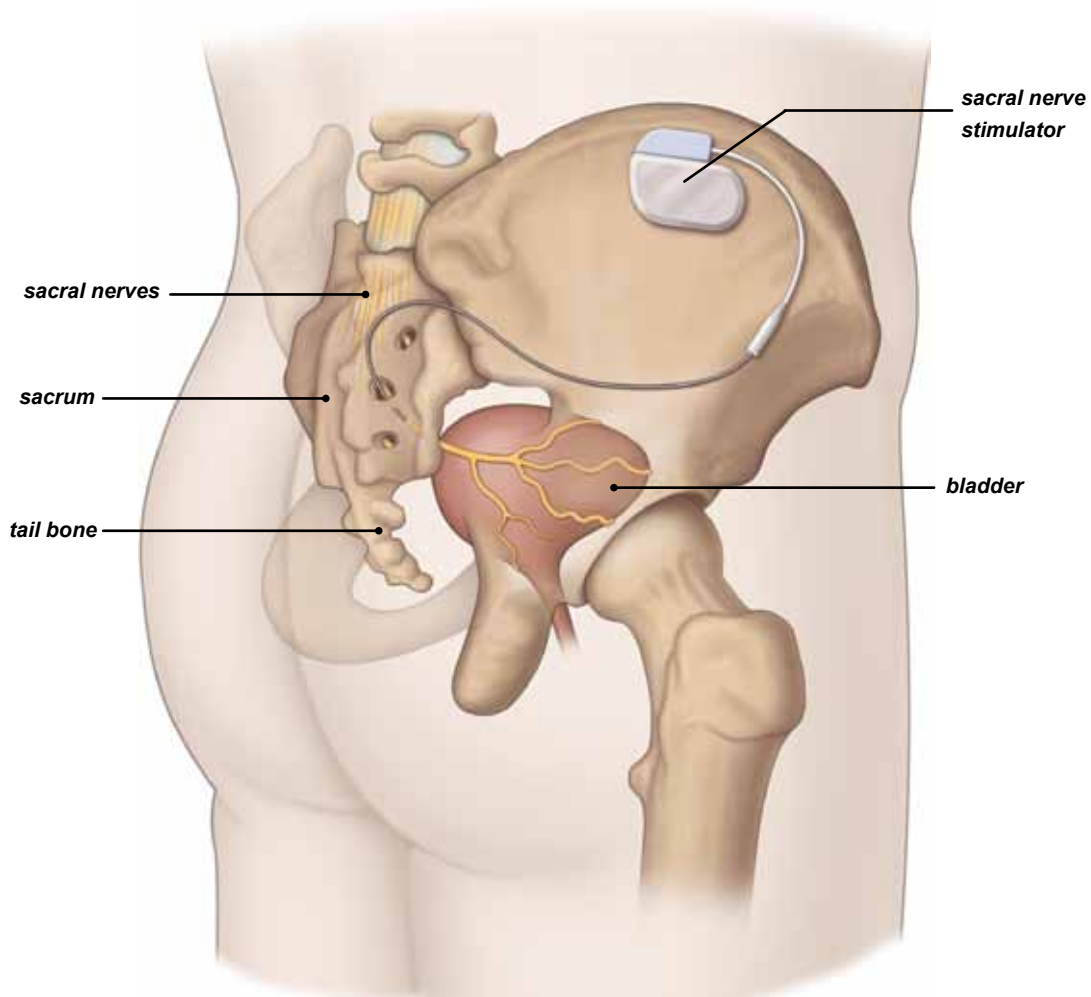


Fig. 3: Sacral nerve stimulation.

Bladder surgery

In case your symptoms have not improved with drug or other treatments, you may need surgery on your bladder. The goal of the procedure is to increase the capacity of the bladder. This will reduce the pressure in the bladder as it fills so that it can hold more urine.

The doctor makes an incision in your lower abdomen and uses a piece of your bowel to increase the size of the bladder. This procedure is called bladder augmentation or clam cystoplasty, and is rarely performed nowadays (**Fig. 4**). If this surgery is recommended you will need to discuss its implications and side effects with your doctor because they can be significant.

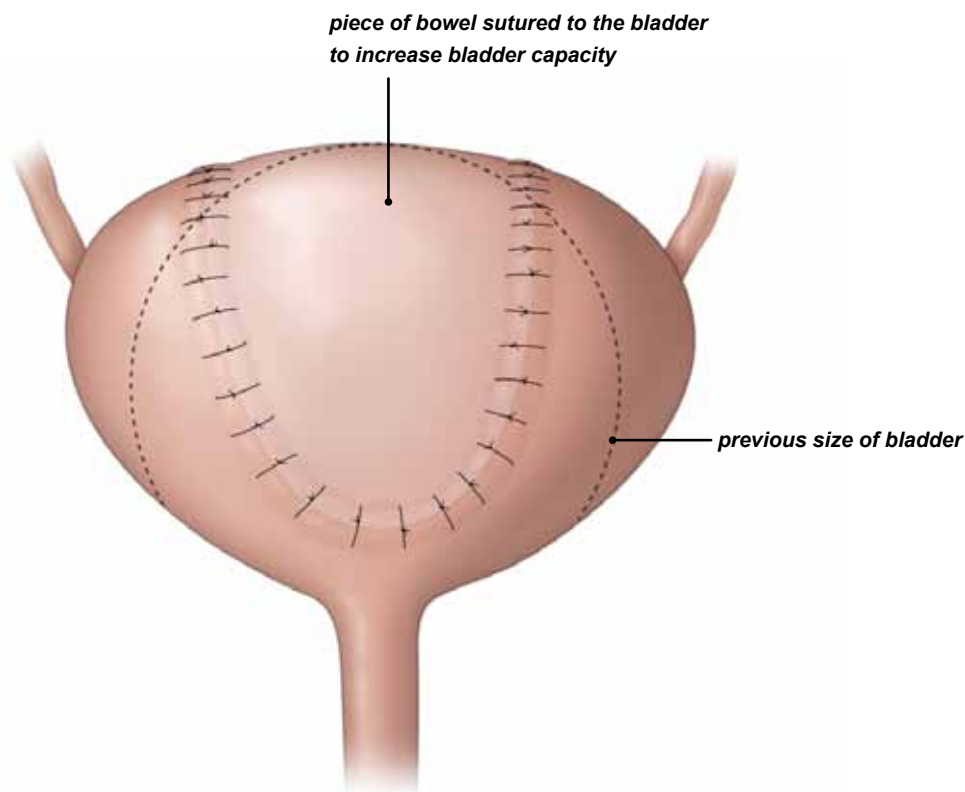


Fig. 4: Bladder surgery to increase the capacity of the bladder.

This information was updated in January 2014.

This leaflet is part of EAU Patient Information on OAB. It contains general information about overactive bladder symptoms. If you have any specific questions about your individual medical situation you should consult your doctor or other professional healthcare provider.

This information was produced by the European Association of Urology (EAU). The content of this leaflet is in line with the EAU Guidelines.

You can find this and other information on urological diseases at our website: <http://patients.uroweb.org>

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