

Ultrasound guided Botox® injection prior to complex ventral hernia repair



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BOTOX® is a brand name for the purified form of Botulinum toxin type A, which is produced by the bacterium *Clostridium botulinum*. It is used in highly diluted doses for medical and cosmetic purposes.

In recent years, Botox injections have been explored as a treatment adjunct for complex hernias. By injecting Botox into specific abdominal muscles, surgeons aim to relax these muscles, reducing tension and facilitating hernia repair. In this way Botox injection can decrease the need for extensive surgery necessary to divide the layers of abdominal muscles.

Ultrasound-guided Botox injection offers a precise and effective treatment option for complex hernias by selectively targeting specific muscles in the abdominal wall. By combining the therapeutic benefits of Botox with advanced ultrasound imaging technology, healthcare providers can optimise treatment outcomes and enhance patient recovery.

Having a Botox injection before hernia surgery offers several benefits:

1. Reducing hernia gap size

Botox injection is used for large abdominal wall hernias with a gap in between abdominal muscles over 6.5cm in width, making it easier for the surgeon to close the gap. Botox is injected in the lateral abdominal wall muscles, three injections each side, under ultrasound guidance.

2. Lowering muscle tension

Botox is paralyzing the muscles making possible approximation of the muscle during surgery and it is decreasing the risk of hernia recurrence.

3. Postoperative pain reduction

Botox helps reduce pain following hernia repair surgery.

The effect of Botox is maximum after two weeks and lasts at least three months. It can cause a weak cough and sneeze, in which case an abdominal binder can be useful.

Botox injection should be avoided if you:

1. are pregnant or breast feeding
2. have a neuromuscular conditions like muscular dystrophy, Myasthenia Gravis, Bell's palsy, amyotrophic lateral sclerosis, history of dysphagia
3. have breathing problems like asthma, emphysema, COPD
4. are taking medication like calcium channel blockers, Amynoglicoside or Penicillin
5. are under 18 years old
6. have alcoholism or renal function impairment

You should let your surgeon know if you:

1. had any previous Botox injection
2. take any blood thinning medication
3. have any heart conditions, signs of local or systemic infection
4. had previous local anaesthetic reaction/allergy

5. had recent chemotherapy or radiotherapy
6. have Diabetes type 1. Diabetic patients injecting insulin may have a higher risk of developing infection at the site of injection and are advised to use an alternative site for insulin injection.

What to expect during the procedure

The entire process is performed in outpatients setting and typically takes around half an hour. During the ultrasound-guided Botox injection procedure, you will be positioned comfortably on an examination table. The ultrasound probe will be gently moved over the skin to visualise the abdominal muscles. Your doctor will then administer the injections with precision, guided by the real time ultrasound images. You will be asked to not move or cough during the injections.

After the procedure

Following the ultrasound guided Botox injection, you will have a a small plaster covering the injection sites. Please inform staff if you have any allergies to plasters. A set of observations will be taken and you will be able to go home after 30 minutes providing your observations are satisfactory. You may experience some mild discomfort or bruising at the injections sites. This is normal and should resolve within a few days. Immediately after the procedure we would advise to not drive home.

While ultrasound-guided Botox injections are generally safe, it is essential to be aware of potential risks and complications, which may include flu like symptoms, headache, weak cough, dry mouth, malaise, allergic reaction, temporary muscle weakness, bleeding, infection.

If any of these develop, please inform the surgical team on call via hospital switchboard on 01493 452452

After the Botox injection, you are advised to avoid drinking alcohol, having strenuous activities, and travelling by air for two days. You can take over-the-counter pain killers if necessary.

You must contact emergency services/999 if you develop any difficulties breathing, chewing, swallowing, chest pain, and muscle weakness away from the site of injection.

Your Feedback

We want your visit to be as comfortable as possible - talk to the person in charge if you have any concerns. If the ward/department staff are unable to resolve it, then ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care.

Before leaving please complete a Friends and Family Test feedback card.

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OUR VALUES

Collaboration

We work positively with others to achieve shared aims

Accountability

We act with professionalism and integrity, delivering what we commit to, embedding learning when things do not go to plan

Respect

We are anti-discriminatory, treating people fairly and creating a sense of belonging and pride

Empowerment

We speak out when things don't feel right, we are innovative and make changes to support continuous improvement

Support

We are compassionate, listen attentively and are kind to ourselves and each other



The hospital can arrange for an interpreter or person to sign to assist you in communicating effectively with staff during your stay. Please let us know.

For a large print version of this leaflet, contact PALS 01493 453240