

Botulinum toxin for masseter hypertrophy and temporomandibular disorders

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This leaflet explains the use of botulinum toxin for the treatment of masseter hypertrophy and temporomandibular disorders (TMD) in adults aged 18 and over. It outlines the benefits, risks, and what you can expect from the treatment. If you have any further questions, please speak to your Consultant.

Botulinum toxin is recommended for:

The treatment of masseter hypertrophy in adults aged 18 and over where:

- Symptoms result in functional issues (e.g., spasm and pain, limited mouth opening), and
- Failed or lack of response to conservative measures (over a three-month period), e.g., physiotherapy, orthodontic interventions (bite adjustments or teeth splints where relevant), and appropriate pharmacological interventions (analgesics, anti-inflammatories, muscle relaxants), and
- Quality of life is affected significantly due to constant pain and restriction in mouth opening.

The treatment of temporomandibular disorders (TMD) in adults aged 18 and over where:

- Symptoms result in functional issues (e.g., spasm and pain, limited mouth opening), and
- The spasm is localised (not diffuse), and
- Failed or lack of response to conservative measures (over a three-month period), e.g., physiotherapy, orthodontic interventions (bite adjustments or teeth splints where relevant), and appropriate pharmacological interventions (analgesics, anti-inflammatories, muscle relaxants), and
- Quality of life is affected significantly due to constant pain and restriction in mouth opening.

Botulinum toxin is **not** recommended for the treatment of masseteric hypertrophy for solely cosmetic reasons.

Key points

Botulinum toxin, commonly known as Botox, is a neurotoxin that has become very popular as a cosmetic treatment for wrinkles and fine lines. However, it is also used to treat a number of medical disorders, such as temporomandibular joint disease (TMJ), chronic migraines, and hyperhidrosis.

What is masseter Botox?

Injecting botulinum toxin type A into the masseter muscle is a cosmetic and therapeutic procedure known as masseter Botox. The masseter muscle, located in the cheek region right in front of the ear, is one of the four muscles that move the jaw. When this muscle is overactive, it can result in several cosmetic and therapeutic issues, including jaw clenching, asymmetrical face, larger jaw muscles, and teeth grinding (masseter hypertrophy).



What is teeth grinding and jaw clenching (bruxism)?

Teeth grinding and jaw clenching (bruxism) can lead to dental and medical issues such as tooth destruction, headaches, and jaw pain. Overuse of the masseter muscles is a common contributor to these disorders. Masseter Botox can help reduce the activity of these muscles, thereby lessening jaw clenching and teeth grinding.

What is masseter hypertrophy?

Masseter hypertrophy occurs when the masseter muscle enlarges or overdevelops. This can be caused by factors such as heredity, teeth clenching or grinding, bruxism, and excessive muscle use. Symptoms include pain or discomfort in the jaw, headaches, difficulty opening the mouth, and aesthetic concerns due to a more pronounced jawline.

Botox for the masseter muscle: What can it treat? Cosmetic concerns

Masseter Botox is often used to address cosmetic issues such as facial asymmetry and masseter hypertrophy. By reducing the size of the masseter muscles, it can help achieve a thinner, more proportionate jawline.

Temporomandibular joint disorder (TMJ)

TMJ causes pain and discomfort by affecting the jaw's joints and muscles. Overuse of the masseter muscles can lead to stress and strain in the jaw joint. Masseter Botox can reduce masseter muscle activity, thereby lowering jaw joint stress and strain, as well as pain and discomfort.

How masseter Botox works

Botulinum toxin type A prevents the release of acetylcholine, a neurotransmitter necessary for muscle contraction. When injected into the masseter muscle, Botox attaches to the nerve ends, stopping the release of acetylcholine. This causes the muscle to relax and reduces its activity, leading to less pressure and stress on the jaw joint and a reduction in the size of the masseter muscles.

Side effects of masseter Botox

Although generally minor and temporary, side effects of masseter Botox can include:

- Swelling and redness: Pain and bruising at the injection site, which usually improves in a few days.
- **Headache:** A common side effect that can be managed with over-the-counter painkillers.
- **Dry mouth:** Some patients may experience dry mouth, which typically resolves on its own.
- **Difficulty chewing:** This is usually a brief side effect that goes away in a few days.
- Allergic reactions: Rarely, patients may develop an allergy, with symptoms such as itching, rash, hives, swelling, and breathing issues. Seek emergency medical treatment if you experience these symptoms.

Precautions and considerations about masseter Botox

Discuss any health issues, allergies, and medications with your Consultant before having masseter Botox. Some illnesses and drugs may increase the risk of complications. Follow all aftercare guidelines provided by your Consultant, which may include avoiding certain activities, such as rigorous exercise, for a while after the treatment.