



**PAN MERSEY AREA PRESCRIBING COMMITTEE**  
**PRESCRIBING POLICY STATEMENT**  
REF: PS67 FINAL  
FIRST APC BOARD DATE: 28 MAY 2014  
LAST APC BOARD DATE: 23 MAY 2018



**Pan Mersey**  
Area Prescribing Committee

## **BOTULINUM TOXIN Type A injection for chronic anal fissure**

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**The Pan Mersey Area Prescribing Committee recommends prescribing a maximum of TWO COURSES of botulinum toxin type A injection in the treatment of chronic anal fissure which has not healed despite a minimum course of at least 8 weeks of topical management.**

Botulinum toxin type A is recommended as a treatment option in adults and children with chronic anal fissure that has not healed despite at least 8 weeks of topical management. It has a similar mechanism of action to topical products. The preferred first line topical product is 0.4% glyceryl trinitrate (GTN) ointment, the only licensed non-surgical option available in the UK. Unlicensed topical 2% diltiazem cream and unlicensed topical 0.2% GTN ointment are alternatives if there has been a partial response to topical 0.4% GTN but intolerance, such as headache, has necessitated discontinuation.

For patients who proceed to treatment with botulinum toxin type A and whose fissure has not healed after one course of injections, alternative options for on-going management should be considered. However where the specialist determines there has been a partial response to the first course, a second course may be considered particularly for patients where surgery is less suitable.

To assist with healing and prevention of recurrence of fissures, patients should be encouraged to eat a high fibre diet and use laxatives if necessary.

The body of evidence suggests that botulinum toxin type A is less effective than surgery, no better or worse than topical GTN ointment (mostly 0.2%) or topical isosorbide dinitrate (unlicensed) and no better than placebo or lidocaine at healing anal fissure. The MHRA has warned healthcare professionals about the rare but serious risk of toxin spread when using all types of botulinum toxin.<sup>1,2</sup>

Lateral sphincterotomy is regarded as the current 'gold standard' treatment, resulting in fissure healing in more than 90% of patients. However, a significant minority of patients experience incontinence. Up to 30% of patients have difficulty controlling flatus, 20% soiling and 3-10% have episodes of leakage after surgery<sup>4</sup>. This compares to 10% and 5% respectively having temporary incontinence to flatus, and to liquids and faeces following treatment with botulinum toxin type A<sup>3</sup>.

**Note:** Patients who are not eligible for treatment under this statement may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. In this situation, follow locally defined processes.

## BOTULINUM TOXIN Type A injection for chronic anal fissure

<p><b>EFFECTIVENESS</b></p> <p>Botulinum toxin type A induces a relative hypotonia, thus reducing resting anal canal pressure. This effect lasts for 2–3 months until acetylcholine re-accumulates in the nerve terminal.</p> <p>2 systematic reviews and a 4 further randomised controlled trials form the body of evidence.<sup>3</sup> There were fewer than 100 participants in most of the trials with a follow-up of less than 6 months. Botulinum toxin type A injection was found to be less effective than surgery, no better or worse than topical glyceryl trinitrate (mostly 0.2% ointment) and no better than placebo or lidocaine at healing anal fissure. The overall healing rate after one course of injections was 77% in the Cochrane review (doses and follow-up periods varied).<sup>3</sup></p> <p>A systematic review and meta-analysis identified six RCTs that compared botulinum toxin type A injection with topical nitrates. Botulinum toxin is associated with fewer side effects than topical nitrates but there is no difference in fissure healing or recurrence.<sup>5</sup></p> <p>The Association of Coloproctology of Great Britain and Ireland (ACPGBI) Position Statement recommends botulinum toxin type A when topical management has failed.<sup>4</sup></p>	<p><b>SAFETY</b></p> <p>Botulinum toxin type A is contraindicated in:</p> <ul style="list-style-type: none"> <li>hypersensitivity to the active substance or to any of the excipients.</li> <li>infection at the proposed injection site(s).</li> </ul> <p>The MHRA issued a warning in 2007 which was reiterated in March 2013 regarding the rare but serious risk of toxin spread with all botulinum toxin products.<sup>1,2</sup></p> <p>See the Summary of Product Characteristics for the respective brand of botulinum toxin type A for full details.<sup>5</sup> <a href="http://www.medicines.org.uk/">www.medicines.org.uk/</a></p>																		
<p><b>COST<sup>7,8</sup></b></p> <ul style="list-style-type: none"> <li>Drug only cost (including VAT) for one, 100 unit vial is £129.90.</li> <li>Botulinum toxin type A injection will usually be administered in an operating theatre under general or regional anaesthesia. An estimated day case tariff is £617.<sup>9</sup></li> </ul> <table border="1" data-bbox="81 1010 917 1413"> <thead> <tr> <th>Drug</th> <th>Cost per course</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Botox 100 units (assuming wastage)</td> <td>£747 (3 months)</td> <td>Includes administration tariff</td> </tr> <tr> <td>GTN 0.4% ointment</td> <td>£78.60 (2x30g, 8 weeks)</td> <td>Self-administered</td> </tr> <tr> <td>GTN 0.2% ointment</td> <td>£33.74 (2x30g, 8 weeks)</td> <td>Self-administered</td> </tr> <tr> <td>Diltiazem 2% cream</td> <td>£114.84 (2x30g, 8 weeks)</td> <td>Self-administered</td> </tr> <tr> <td>Diltiazem 2% ointment</td> <td>£56.86 (2x30g, 8 weeks)</td> <td>Self-administered</td> </tr> </tbody> </table>	Drug	Cost per course	Comments	Botox 100 units (assuming wastage)	£747 (3 months)	Includes administration tariff	GTN 0.4% ointment	£78.60 (2x30g, 8 weeks)	Self-administered	GTN 0.2% ointment	£33.74 (2x30g, 8 weeks)	Self-administered	Diltiazem 2% cream	£114.84 (2x30g, 8 weeks)	Self-administered	Diltiazem 2% ointment	£56.86 (2x30g, 8 weeks)	Self-administered	<p><b>PATIENT FACTORS</b></p> <ul style="list-style-type: none"> <li>Injection is usually given in an operating theatre with the patient under general or regional anaesthesia.</li> <li>Patients should be warned about the signs and symptoms of toxin spread, such as muscle weakness and breathing difficulties, and advised to seek medical attention if they experience such symptoms.</li> <li>Temporary incontinence to flatus occurs in approximately 10% of patients, and to liquids and faeces in approximately 5% of patients<sup>3</sup>. Patients should be warned regarding the risk of transient anal incontinence associated with botulinum toxin.</li> </ul>
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### PRESCRIBING INFORMATION

- Botulinum toxin type A is unlicensed for the treatment of anal fissures. The dose most likely to be used locally is up to a maximum of 100 units given either as a single injection or two injections either side of the sphincter muscle.

### IMPLEMENTATION NOTES

- Botulinum toxin type A should be prescribed and administered by specialists experienced in the administration of injections to the internal anal sphincter. Treatment and monitoring should be retained by the specialist.

### REFERENCES

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