Use of Botulinum Toxin A for pyloric spasm post oesophagectomy

Botox was approved for post oesophagectomy cancer patients with delayed gastric emptying (DGE) due to pyloric spasm prior to pyloroplasty surgery

The Pathway presents the UHBW Clinical Guidance Document v1.4 Delayed Gastric Emptying.

**Background**

Post oesophagectomy, the gastric conduit may not empty appropriately, resulting in symptoms of nausea, vomiting and epigastric pain. In addition, poor gastric emptying can lead to an increased risk of aspiration and anastomotic leak. Although not fully understood, DGE is believed to be caused by disruption to the innervation of the stomach, impairing peristalsis, and by damage to the vagal nerves leading to pyloric stenosis.

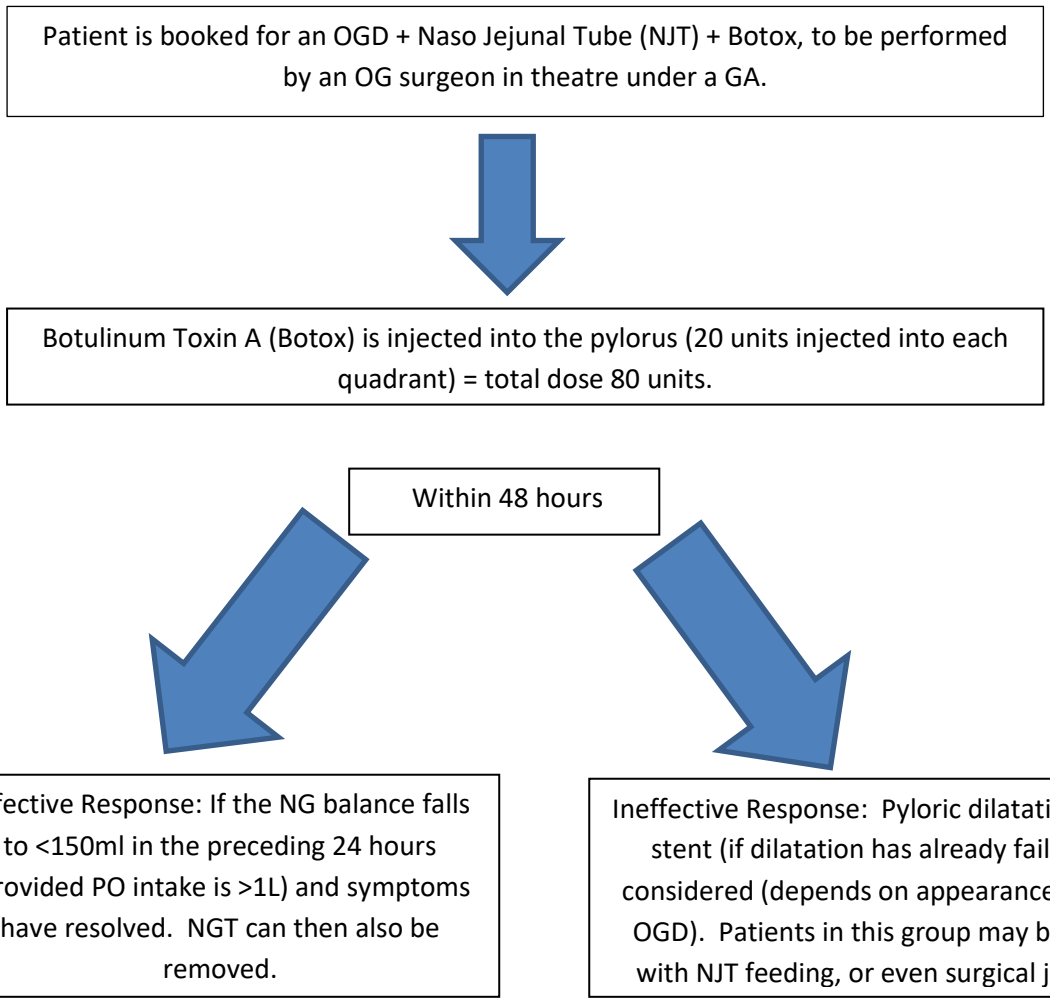
The incidence of clinically relevant DGE is considered to be in the range of 10-20%, although some studies have reported ranges up to 47%.

**Diagnosis of Pyloric Spasm post oesophagectomy**

The locally agreed criteria for a diagnosis of DGE to be made are:

1. NG balance is >150ml (provided that the patient has an oral intake of > 1L)on or after the post-operative day 5
2. And the patient has had a trial of prokinetic agent (commenced on day 3)

**Pyloric Spasm post-oesophagectomy**

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**Follow Up and Repeat Injections**

Patients are routinely reviewed in clinic following Oesophagectomy. Local policy is 2-3/52 post-discharge, then 3 monthly until 1 year post-op, then 6/12ly until 2 years post-op then annually until 5 years post-op. At clinic, symptoms of DGE will be assessed (epigastric/chest pain, nausea and/or vomiting and feeling full easily) will be assessed.

If, on review in clinic, the patient has symptoms of on-going DGE an OP OGD +/- Botox injection by an OG Surgeon will be requested. Response varies but most patients see a lasting response from 1 injection. Of those that get recurring symptoms, Botox would be repeated once if the recurrence was within 2 weeks, and be deemed a treatment failure if the same pattern occurs.

For those that get more durable responses lasting months, up to 3 Botox injections 4-6 months apart may be given before considering a stent as a prelude to pyloroplasty. This defers any major surgery until a time there is confidence that tumour recurrence has not occurred (highest risk in first 2 years).

**Audit**

As per the Clinical Guidance document, UHB plan to audit:

The number of patients who have their NGT removed at day 3 will be recorded. The number of patients who require a prokinetic will be recorded.

The number of patients who require OGD + Botox will be recorded. In this group, the time taken to removal of NGT + return to oral diet and time to discharge will also be recorded. These results will be audited.