

# Tract salvation

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# Conflicts of Interests Declaration

- NONE

# Tract Salvation- what will we learn?

- Why is it important?
- Mature tract Versus Immature tract
- Complete removal Versus partial distal closure
- Dilation- what can/should you do?
- When to refer on
- Practical demonstration
- Build your emergency kit

# 3 Scenarios

- Complete removal- immature tract
- Partial displacement- distal closure- immature tract
- Complete removal of tube- mature tract- tract dilation

# Mature tract- complete removal

- 12 Weeks +
- Practical demonstration

# LTHT SOP- Dilation of gastrostomy tracts

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Standard operating procedure for the dilation of gastrostomy tracts (adults)
<b>SOP Detail</b>  Ownership: LTHT Enteral and Parenteral Guidelines Group Publication date: Dec 2021 Next Review date: 8/8/24 Status:
<b>Aims</b> <ul style="list-style-type: none"><li>To standardise practice</li><li>To minimise the risk of intraperitoneal placement of feeding tubes or other devices</li></ul>
<b>Background</b> <p>There are occasions when there is clinical need to stretch a gastrostomy tract, from a small diameter to a larger diameter. This might be due to the prior inadvertent removal of a gastrostomy tube or in order to place a larger tube for other clinical reasons such as improving venting/gastric drainage.</p> <p>Tract dilation should only be attempted by a trained practitioner 12 weeks after initial insertion. Immature tracts should not be done in the way outlined in this SOP and should be referred to interventional radiology where the procedure can be done under radiological guidance.</p> <p>It is vital that position in the stomach is confirmed prior to the introduction of feed, fluids or medication, to prevent chemical peritonitis.</p> <p>The specialist equipment (wires and dilators) can be found in the emergency gastrostomy box or endoscopy or radiology departments.</p> <p><i>Please note this SOP does not outline the procedure for tract dilation of jejunostomy tracts. These patients should be referred to interventional radiology where the procedure can be carried out under radiological guidance.</i></p>

- Decontaminate hands
- Clean the work surface using detergent wipes
- Collect equipment required (guided by the needs of the patient)
- Decontaminate hands; put on apron and non-sterile gloves
- Clean the gastrostomy site and apply instilagel (if no allergies to lidocaine)
- Cut the end off an \*8fr NGT and insert into gastrostomy tract approximately 10cm. Obtain gastric aspirate and confirm position with pH indicator paper(1-5)
- Insert a soft tipped terumo wire through the NGT until you are sure it is well within the stomach, then remove the NGT - being careful not to displace the wire
- Insert a 9fr dilator over the wire and introduce it into the stomach, ensuring the dilator can manoeuvre through the entire length of the tract.
- Repeat this procedure by choosing a larger dilator each time until you reach the desired tract size
- NB: It is often required to dilate one size larger than desired tract size to ensure easier insertion of final gastrostomy tube
- Once dilation is achieved slide the appropriate sized gastrostomy tube over the wire and insert fully through the tract
- Blow up the balloon and remove the wire
- Confirm gastric position by testing gastric aspirate with pH indicator paper (1-5)
- Ensure correct positioning of the gastrostomy tube's external fixator  
\*If an 8fr won't advance, try a 6fr or a 5fr NGT

## Procedure method- gastrostomy tube insitu

- Decontaminate hands
- Clean the work surface using detergent wipes
- Collect equipment required (guided by the needs of the patient)
- Decontaminate hands; put on apron and non-sterile gloves
- Clean the gastrostomy site and apply instilagel (if no allergies to lidocaine)
- Confirm gastric position by testing gastric aspirate with pH indicator paper (1-5)
- Insert a soft tipped terumo wire through the gastrostomy until you are sure it is well within the stomach, then deflate the balloon and remove the tube being careful not to displace the wire
- Insert the next-size up dilator over the wire and introduce it into the stomach, ensuring the dilator can manoeuvre through the entire length of the tract.
- Repeat this procedure by choosing a larger dilator each time until you reach the desired tract size
- NB: It is often required to dilate one size larger than desired tract size to ensure easier insertion of final gastrostomy tube
- Once dilation is achieved slide the appropriate sized gastrostomy tube over the wire and insert fully through the tract
- Blow up the balloon and remove the wire
- Confirm gastric position by testing gastric aspirate with pH indicator paper (1-5)
- Ensure correct positioning of gastrostomy tube's external fixator

# ● Immature tract- complete removal

Less than 12 weeks

Practical demonstration

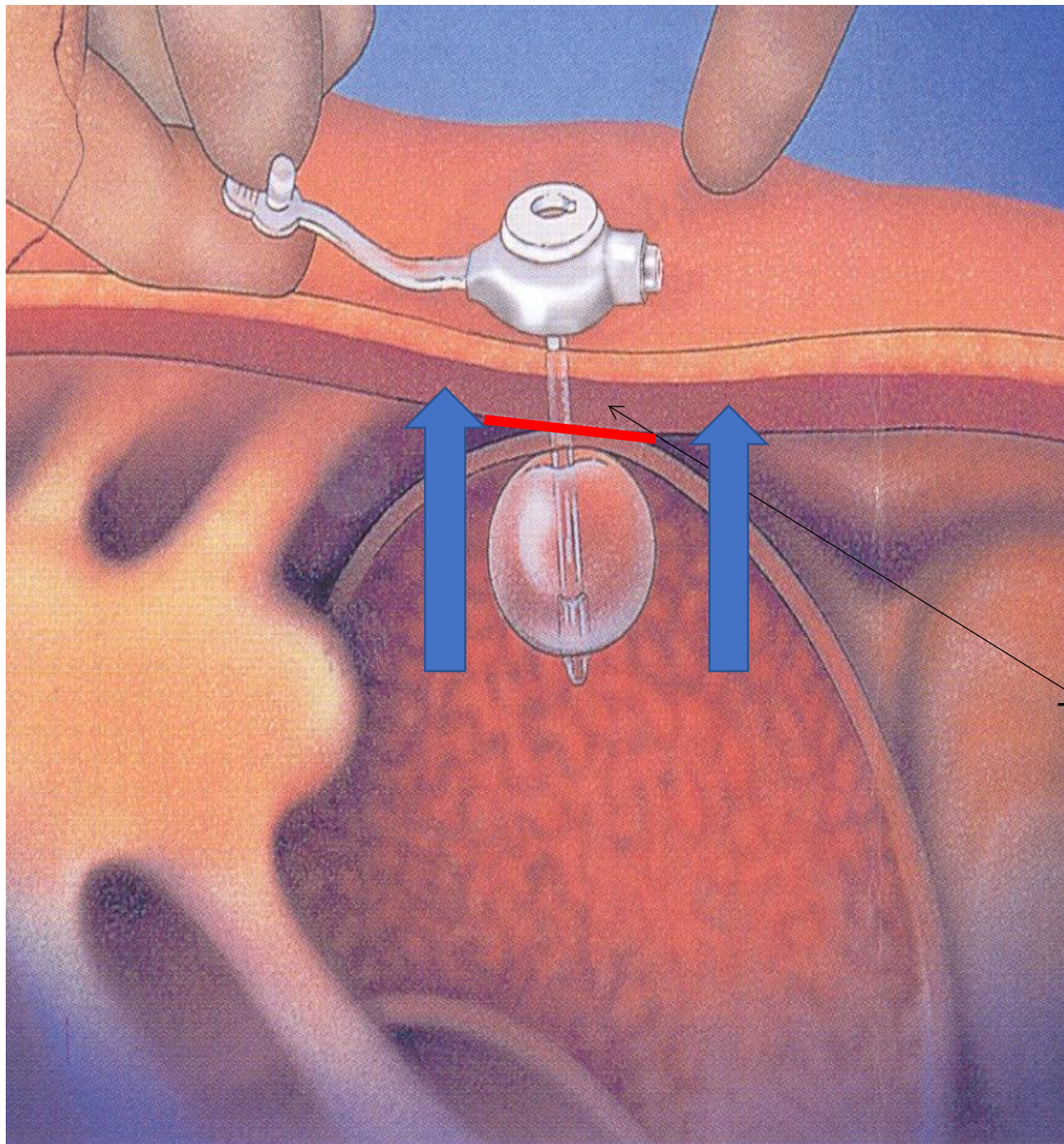
# Immature tract- partial displacement- distal closure

- Case study
- 53 yo nasopharyngeal ca
- RIG placed 3 weeks ago
- Attending daily for radiotherapy
- Tube would not advance on routine BVC
- What would you do?



## Assess the tube

- Deflate the balloon
- Attempt to advance
- Attempt aspiration ...just bloody dribbles...?
- Suspect distal closure- plan to salvage



In distal closure, the balloon/bumper moves out of stomach into tract and bottom of tract starts to close

# LTHT SOP- immature tract salvation

## Standard operating procedure for tract salvation in immature gastrostomy tracts (adults)

### SOP Detail

Ownership: LTHT Enteral and Parenteral Guidelines Group  
 Publication date: 25/09/2024  
 Next Review date: 25/09/27

### Aims

- To standardise practice
- To minimise the risk of intraperitoneal placement of feeding tubes or other devices
- To prevent repeated gastrostomy insertion

### Background

It is generally acknowledged that gastrostomy tracts are classed as matured after 12 weeks from insertion and that attempting tube replacement blindly earlier than this carries a risk. However, there are occasions when there is clinical need to salvage an immature gastrostomy tract to prevent another gastrostomy insertion procedure. This may be due to the accidental removal of a newly inserted gastrostomy tube or migration of the bumper into the tract causing distal closure.

Gastrostomy insertion and tract salvation should only be attempted by a trained practitioner. The patient should then be referred to interventional radiology where the final procedure can be carried out under radiological guidance, using the same tract.

It is vital that position in the stomach is confirmed prior to the introduction of feed, fluids, or medication, to prevent chemical peritonitis.

The specialist equipment (wires and feeding tubes) can be found in the emergency gastrostomy box, endoscopy or radiology departments.

*Please note this SOP does not outline the procedure for tract dilation of jejunostomy tracts. These patients should be referred to interventional radiology where the procedure can be carried out under radiological guidance.*

### Procedure- Gastrostomy tube completely displaced (tract salvage)

- Decontaminate hands
- Clean the work surface using detergent wipes
- Collect equipment required (guided by the clinical need)
- Wash hands with soap and water, put on apron, and apply non-sterile gloves
- Clean the gastrostomy site and apply instillagel (if no allergies to lidocaine)
- Insert a gastrostomy tube of the same size into the tract. If this is not possible place a smaller tube into gastrostomy tract to a depth of approximately 10cm. Obtain gastric aspirate and confirm position with pH indicator paper (pH 1-5)
- Once gastric position is confirmed, secure tube to abdomen with hypafix or tape.

- Decontaminate hands
- Clean the work surface using detergent wipes
- Collect equipment required (guided by the clinical need)
- Wash hands with soap and water, put on apron, and apply non-sterile gloves
- Clean the gastrostomy site and apply instillagel (if no allergies to lidocaine)
- Insert a gastrostomy tube of the same size into the tract. If this is not possible place a smaller tube into gastrostomy tract to a depth of approximately 10cm. Obtain gastric aspirate and confirm position with pH indicator paper (pH 1-5)
- Once gastric position is confirmed, secure tube to abdomen with hypafix or tape.
- Now the tract is salvaged, discuss with Interventional Radiology if the patient requires MRSA decolonisation and arrange appointment required. This may be to confirm gastrostomy tube position with contrast (tracts less than 4 weeks old) tract dilation and insertion of gastrostomy tube or replacement to a gastrostomy tube (i.e if foley catheter used to salvage the tract).

### Procedure - suspected distal closure of the gastrostomy tract (balloon retained device)

In the case where you suspect the distal portion of the tract may have started to close i.e. if a tube won't advance during a balloon volume check

- Insert a soft tip guidewire through the tube to assess extent of distal closure
- If this advances well, deflate the balloon, and remove the gastrostomy tube
- Cut the side holes off an 8fr NGT to make a single end hole and place NG tube over the guidewire. If it will not advance, try a 6fr or 5fr NGT
- Remove guidewire and confirm gastric position with pH check.
- Once gastric position is confirmed, secure tube to abdomen with hypafix or tape.
- Now the tract is salvaged, discuss with Interventional Radiology if the patient requires MRSA decolonisation and confirm appointment for tract dilation and insertion of gastrostomy tube

### Procedure - suspected distal closure of the gastrostomy tract (non-balloon retained device i.e. PEG)

In the case where you suspect the distal portion of the tract may have started to close i.e. if a tube won't advance during a routine advance and rotate or it has been pulled, and the tract length also appears shorter

- Insert a soft tip guidewire through the tube to assess extent of distal closure
- If this advances well, consider traction pull to remove the tube over the wire. This may cause tract disruption in an immature tract and be very painful, so consider use of intravenous sedation in the endoscopy department

### Algorithms