Gastrostomy feeding tube introducers should not be re-inserted into the feeding tube while the tube is in the patient (due to risk of tube perforation and serious injury) unless absolutely necessary and should only be performed by expert clinicians.\(^2\)

Appropriate pain relief should be given to minimise patient discomfort during the removal process.

**b) Inserting the replacement tube or device**

- Local guidelines should be followed when replacing a gastrostomy tube or device.
- Where the tract is mature the procedure can be performed in an appropriate setting (including bedside, clinic or home) by an adequately trained health care professional\(^{2, 66, 69, 70, 82, 92, 150, 151, 167-170}\) (GRADE C)
  - An experienced health care professional may teach a patient/carer to change their own gastrostomy tube or device.

Fasting times for the procedure will vary depending on the type of tube or device and the method of placement. This should be discussed with the proceduralist.

Before restarting feeds, tube or device placement should be confirmed and advice obtained from the proceduralist.

**Confirmation of placement**

The gold standard method to confirm the position of a replacement gastrostomy tube or device is radiological contrast study or endoscopy\(^{20, 22, 66, 69, 71, 82, 150, 152, 153, 167, 168, 176-181}\) (GRADE A)

However, these methods may not always be practical due to the resources available. In this situation, confirmation of the position of the replacement gastrostomy tube or device in a mature stoma should ideally be done using all of the following methods:

- **Aspiration of gastric content**\(^{20, 22, 66, 69, 71, 82, 150, 152, 153, 167, 168, 176-181}\) (GRADE D)
  - This may be limited as the inability to obtain an aspirate does not always indicate the tube or device is in the incorrect position.
- **pH testing of aspirate** (where available) with universal indicator paper to ensure pH <5.\(^{20, 22, 66, 69, 71, 82, 150, 152, 153, 167, 168, 176-181}\) (GRADE D)
  - This method is unreliable if the patient is on gastric acid suppression medication or continuous enteral feeding.

- **Confirmation of the external length of the gastrostomy tube**\(^{20, 22, 66, 69, 71, 82, 150, 152, 153, 167, 168, 176-181}\) (GRADE D)
  - Not applicable to low profile devices.
- **Flush with a volume of sterile water appropriate for the patient (for example 30-50mls for adults) and ensure no resistance, pain or leakage.**\(^{20, 22, 66, 69, 71, 82, 150, 152, 153, 167, 168, 176-181}\) (GRADE D).
- **Rotate the tube or device and perform “in-out play” to ensure free movement of the tube or device in the tract.**

**NOTE:** If there is any concern or doubt about the position of the replacement tube or device a radiological contrast study must be performed. This includes if firm resistance is encountered or several attempts are required to reinsert the tube or device.\(^{20, 22, 66, 69, 71, 82, 150, 152, 153, 167, 168, 176-181}\) (GRADE C)

Air insufflation to confirm tube or device position is unreliable and should not be used\(^{20, 22, 66, 69, 71, 82, 150, 152, 153, 167, 168, 176-181}\) (GRADE B)

If the patient complains of pain, check that the tube or device moves in and out freely and rotates easily. If the patient continues to complain of discomfort a radiological check is required.

Once the correct placement has been documented and there are no other contraindications, use of the tube or device may resume as per local procedure.

**Documentation**

Documentation of the replacement procedure in the medical record should include:

- The type, brand and size of the gastrostomy tube or device
- The method of insertion and the procedure used to confirm the correct placement of the tube or device
- Appearance of the gastrostomy site - any ooze, firmness, or signs of infection
- Markings at skin level for relevant devices (i.e. where the external flange is sitting at skin level)
- Ballooned tubes/devices - how much sterile water was inserted into the balloon
- Patient tolerance of the procedure
- Planned follow-up arrangements
- Any other relevant tube/device-related information.

*Please see Appendix 6 for an example of a gastrostomy tube or device replacement record.*