

# **GENERAL GASTROSTOMY TUBE CARE**

The recommendations in this section refer to Percutaneous Endoscopic Gastrostomy, Radiological Inserted Gastrostomy (adults only) and Balloon Retained Gastrostomy

ISSUE	STATEMENT	EVIDENCE / REFERENCE
Care following initial stoma formation	Following initial formation of the stoma there may be slight bleeding from the wound.	CREST (2004) Guidelines for the Management of Enteral Tube Feeding.
	The stoma should be left undisturbed for 24 hours. Clean the stoma site with saline using aseptic technique for the first 48 hours. Thereafter, use a clean cloth and water and dry thoroughly.	NICE (2006) Nutrition Support for Adults Oral Nutrition Support, Enteral Tube Feeding and Parenteral Nutrition
	During the first 14 days the patient should not have a bath or go swimming to reduce the risk of	Haywood, S (2012) Nursing Time 108(42). 20-22 PEG feeding tube placement and aftercare
	bacterial entry to the peritoneum. Showers are acceptable. Wash the stoma site prior to rest of the body. Paediatric advice – no swimming for 6 weeks	National Patient Safety Agency (2010) Rapid Response Report. Early Detection of Complications after Gastrostomy Insertion. NPSA/2010/RRR010
	Care must be taken when adjusting the external flixator within two weeks following the tube insertion (PEG tubes only).	
	To adjust - please seek advice from a nutrition nurse, medical staff or a dietitian. Leave at least a 2mm gap between skin surface and fixator.	
	If there is pain on feeding, leakage of fluid around the tube, or new bleeding within first week of insertion, STOP FEED IMMEDIATELY and <u>CONTACT</u> a Nutrition Nurse Specialist or GI Registrar for urgent advice.	



Daily stoma / tube care	Clean the area with a clean cloth and soapy water, rinse and dry thoroughly.  Do not use moisturizing creams or talc around the stoma site.	NICE (2012) Infection. Prevention and control of healthcare-associated infections in primary and community care.
	Reposition the external fixator after cleaning, if appropriate.  The external fixator should not be moved for the first 2 weeks post procedure (PEG tubes or tubes placed with pull through technique). Refer to the manufacturer's guidelines.	Westaby, D, Young A, O'Toole P et al (2010) The provision of a percutaneously placed Enteral tube service GUT 59:1592-1605
	Once a week, the external fixator should be moved and the tube should be moved in and out by a maximum of 10mm. This prevents buried bumper syndrome occurring.	
	Rotate the tube 360° and reposition the external fixator daily, leaving a space of at least 2mm to allow slight movement.  If unsure whether a tube should be rotated, check with the person who placed the tube or refer to the manufacturer's guidelines.	
Stoma problems – infection	Infection can be minimised by scrupulous hygiene of the stoma site.  Avoid occlusive dressings as these can encourage and trap moisture.	Goldberg E, Barton S, Xanthopoulos MS, Stettler N, Licarous CA (2010) A descriptive study of complications of gastrostomy tubes in children. Journal of Pediatric Nursing. 25(2), 72-80.
	Obtain a swab for microbiology if any exudate or inflammation is present.	
	Treat with the appropriate systemic antibiotic as topical may not always be effective, as the infection is usually within the tract and not just superficial.	



ISSUE	STATEMENT	EVIDENCE / REFERENCE
Stoma problems – Candida	The tube often appears to have bobbly or bumpy appearance.	
	A burst balloon or leaking feeding port can also be an indication of candida.	
	Adults	
	If the tube is still patent continue to use tube and monitor for deterioration in tube integrity.	
	If the tube is completely blocked, change the tube as soon as practicable, and contact a Nutrition	
	Nurse for advice.	
	<u>Paediatrics</u>	
	Presence of yeasts in the stomach should be considered if there are problems with recurrent burst	
	balloons or leaking feeding port valves on low profile gastrostomy devices.	
	A gastric aspirate should be sent to microbiology, if yeasts are confirmed they should be treated	
	with 7-10 days of Fluconazole or Itraconazole (depending on organism sensitivity) and the tube	
	should be changed at end of treatment.	



Stoma problems – Overgranulation	Insufficient rotation of the tube or movement of the tube within the tract can cause granulation tissue.  Check that the external fixator is not too loose or too tight. Correct positioning of the external retention device can reduce the risk of overgranulation.  Adults  http://intranet.lothian.scot.nhs.uk/NHSLothian/Healthcare/A-Z/TissueViability/Documents/Lothian%20Joint%20Formulary/Dressing%20Selection%20Guide.pdf  See Appendix 1 - Granuloma flowchart  Paediatrics  Consider the use of an absorptive dressing such as Allevyn Non-Adhesive, Allevyn Adhesive, Tegaderm Foam or Lyofoam. This should be used for a minimum of 2 weeks to determine if it has been effective.  A Steroid-based, Antibiotic or Antifungal cream may be prescribed e.g. Maxitrol eye ointment, Fucidin H or Timodene for paediatric patients	Crawley-Coha T (2004) A Practical Guide for the Management of Paediatric Gastrostomy Tubes Based on 14 Years of Experience Journal of Wound, Ostomy & Continence Nursing 31(4) 193-200.  Rollins H (2000) Hypergranulation Tissue at Gastrostomy Sites Journal of Wound Care 9(3) 127-129.  Best, C (2004) The correct positioning and role of an external fixation device on a PEG. Nursing Times (100)18 50-51.  Vuolo J (2010) Hypergranulation: exploring possible management options. British Journal of Nursing (tissue viability supplement). 19(6), S4-S8.  Warriner L & Spruce P (2012) Managing overgranulation tissue around gastrostomy sites. British Journal of Nursing (tissue viability supplement). 21(5), S14-S24
Leakage around Gastrostomy site	<ul> <li>Consider the following:</li> <li>Check for infection by taking a swab of the stoma site and treat accordingly.</li> <li>Check the internal fixator is against the inner gastric wall by gently pulling the tube outwards until resistance is felt, and ensuring the external fixator is close to the skin, leaving a space of about 2-3mm to allow slight movement.</li> <li>For balloon-retained tubes, check the balloon is still patent and inflated.</li> <li>The French Gauge of tube may be incorrect. Discuss with a specialist e.g. Nutrition Nurse or GI Specialist.</li> <li>Consider the use of barrier preparation e.g. Cavillon, in conjunction with a foam dressing such as Allevyn Non-Adhesive.</li> </ul>	Crawley-Coha T (2004) A Practical Guide for the Management of Paediatric Gastrostomy Tubes Based on 14 Years of Experience <u>Journal of Wound, Ostomy &amp; Continence Nursing</u> 31(4) 193-200.



ISSUE	STATEMENT	EVIDENCE / REFERENCE
End of the tube has perished	There are no replacement ends for some types of gastrostomy tubes e.g. balloon retained gastrostomies - these tubes will therefore need replaced if Y-port is damaged.	
	Any staff involved in changing gastrostomy tubes should have received appropriate training and maintained competency to do so.	
	If a replacement end is available, order a new end for tube. Remove the existing end, trim the end of the tube, and insert a new Y-connector as per instructions.	
Frequency of changing tubes	When a tube has been placed, document the approximate time of the next replacement.	
	As a guide:  Gastrostomy tube with internal retention bolster: change if required or clinically indicated.  Balloon gastrostomy tubes: 3-6 months  Low profile devices (internal retention bolster): approximately 24 months  Balloon replacement low profile device: 3-6 months  Life span of the tube can vary depending on medicines and stomach acidity.	



What to do when a gastrostomy tube	
falls out	

#### Paediatrics

If you have been trained and are competent to reinsert the tube then attempt to do so.

If you encounter problems reinserting the tube, then you should attend your local A&E. If you have not been trained to reinsert the tube you should attend your local A&E taking your spare tube with you.

Seek advice from specialists and local protocols

#### Adults

http://intranet.lothian.scot.nhs.uk/NHSLothian/Healthcare/A-

Z/CNT/Protocols/Management%20of%20dislodged%20%20G%20tube%20flowchart%20NPSA%20flowchart%20(PATIENT).xls

http://intranet.lothian.scot.nhs.uk/NHSLothian/Healthcare/ClinicalGuidance/Documents/Management%20of%20dislodged%20%20G%20tube%20flowchart%20NPSA%20flowchart%20(STAFF).xls

It is important to ensure that a spare feeding tube is readily available (correct type and size) irrespective of whether a patient is at home or in hospital.

If a gastrostomy tube falls out then it should be replaced as soon as practicable, preferably within 6 hours, or the stoma will start to close. Mature stomas may take up to 48 hours or longer to heal but some will close more quickly.

The permanent replacement tube or temporary tube should be the same or similar size to the tube which has fallen out.

A foley urinary catheter can be used as a **temporary** measure and the patient may be fed through it until replaced with a suitable tube. <u>However, note that foley catheters are licensed for urethral use only.</u>

Any staff involved in changing gastrostomy tubes should have received appropriate training and maintained their competencies in doing so.



ISSUE	STATEMENT	EVIDENCE / REFERENCE
Fasting prior to and after permanent gastrostomy tube removal	There is no evidence to suggest that fasting is required before or after permanent tube removal, but it may be necessary for the patient to fast for up to 4 hours before the tube is removed, especially if a general anaesthetic is required.	
	Consider the needs of the individual patient but do NOT remove the tube immediately after food or drink.	
	Apply a dry dressing and secure with tape over the stoma site, a foam dressing such as Allevyn adhesive/non adhesive may be required for the first 24-48 hours. Change as required.	



#### **BALLOON RETAINED GASTROSTOMY TUBES** ISSUE STATEMENT EVIDENCE / REFERENCE Frequency of checking the balloon in Follow the manufacturer's guidelines (usually weekly) http://intranet.lothian.scot.nhs.uk/NHSLothian/Healthcare/Aballoon-retained tubes Z/ChildrensServices/PoliciesGuidelines/TeachingGuidelines/Documents/gastrosto mybutton.pdf Remove old water from the balloon and replace with fresh water (according to manufacturers quidelines) using a sterile syringe. Ideally check balloon on the same day each week. There is no evidence to suggest a preference for sterile water vs. sterile saline. Follow the manufacturer's guidelines. Some manufacturers suggest cool, boiled water.

Unable to remove water from balloon

Ensure that the balloon port is kept clean.

Check that luer slip syringe is attached to balloon port firmly. Try again, and if unsuccessful contact a specialist.



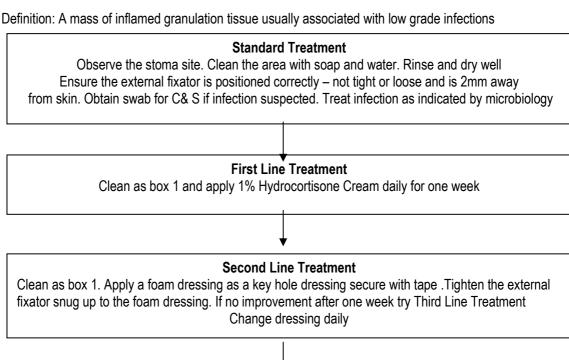
# RADIOLOGICALLY INSERTED GASTROSTOMY TUBE CARE

ISSUE	STATEMENT	EVIDENCE / REFERENCE
Care of sutures following insertion of	Around the stoma there will be two to four sutures in situ.	Early detection of complications after gastrostomy
Radiological Inserted Gastrostomy	Please note that the gastrostomy tube is not held in place by the sutures. The sutures secure	http://www.nrls.npsa.nhs.uk/resources/?entryid45=73457&q=0%c2%acgastrostomy %c2%ac
	stomach wall to the abdominal wall to allow the stoma to be formed	
	These sutures should be removed seven days post procedure by a ward nurse, community nurse or outpatient nurse.	
	Raise the metal fastener and cut the suture, then remove disc and sponge. Internal suture material will pass through the gastrointestinal tract.	
	Some bleeding is normal when removing sutures.	
	Appendix 2 Protocol for the care of Radiologically Inserted Gastrostomy Medicina 14Fr G Tube	



#### Appendix 1

# **Granuloma Flow Chart (for Adults)**



### **Third Line Treatment**

Clean as box1. Apply prontasan soaks for ten minutes daily. Apply foam dressings as above. Tighten the external fixator snug up to the foam dressing. If no improvement after 1-2 weeks try Fourth Line Treatment

Change dressing daily

#### **Fourth Line Treatment**

Clean as box 1. Apply Honey e.g. Actilite® and foam dressing. Tighten the external fixator snug to the foam dressing. Can remain insitu for up to one week

If, after using a Honey product for 1-2 weeks and no improvement in the wound is seen, then further advice should be sought

#### Clinical indication of infection – bacteria/fungal

Erythema, tenderness, purulent discharge, pain, swelling, malodour, elevated temperature A combination of the above could indicate infection Swab the stoma and treat with systemic antibiotics/antifungals

Please contact Nutrition Nurse Specialist via Hospital switchboard for further advice Further information can be found in the Lothian Joint Formulary (LJF)



Protocol for the care of Radiologically Inserted Gastrostomy Medicina 14Fr G Tube



Replacement tube - Merck Corflo14fr Balloon Gastrostomy tube Product code 0901 20032 Replace every 6 months

Corflo Enteral Y extension set Product code 0901 20037

#### **WARNING**

If there is pain on feeding, leakage of fluid around the tube, or new bleeding within first week of insertion, STOP FEED IMMEDIATELY and CONTACT Nutrition Nurse Specialist or GI Registrar for urgent advice. See flowchart overleaf for contact details

#### CARE OF PATIENT FOLLOWING TUBE INSERTION

**Observations:** The patient will be given sedation and analgesia -therefore monitor TPR, BP and Oxygen saturations every ½ hr for the first 2 hours then 4 hourly for 24 hours

**Pain management:** A RIG procedure can be very painful for the first 24hrs Patients must be regularly assessed for pain and adequate analgesia given

**Wound:** Observe the abdominal insertion site for signs of leakage. The site may be covered with a dressing, which should be removed 24hrs post procedure.

**Stoma site:** Clean stoma site with saline using aseptic technique for the first 48 hours, thereafter clean with a clean cloth and water and dry thoroughly.

**Tube:** Observe the position of the tube on return to the ward and note any outward/inward movement. If there is any outward/inward movement gently move external bumper nearer to skin, leaving at least 2mm from skin surface. The tube is retained by water filled balloon (5mls). The tube should be rotated 360° once a day to allow tract formation.

**Sutures:** Around the stoma there will be two or three sutures in situ. Please note the gastrostomy tube is not held in place by the sutures. The sutures secure the stomach wall to the abdominal wall (gastropexy) to allow the stoma to be formed. Nursing staff should remove these sutures seven days post procedure. Lift sponge and cut at skin level. The remaining portion (T fastener in stomach) will be passed out in a bowel movement, or remain embedded in the stomach wall.

Reviewed Aug 2010- Review date may 2012/LMcV

**Balloon:** An internal water filled balloon holds the tube in place. The water volume should be checked and replaced once a week, after the tube has been in situ for 2 weeks. Attach 5ml luer slip syringe to balloon port and withdraw all the fluid. Discard liquid Re-inflate balloon with 5ml sterile water \* NEVER ADMINISTER ANYTHING ELSE DOWN THE BALLOON PORT

**Flushing:** Flush the tube with 50mls of sterile water (hospital) or tap water community. If tap water identified as high risk use cooled boiled water. Flush **before** and **after** commencement of the feed and administration of medicines.

**Eating:** Patients must remain nil by mouth for 4 hours after procedure and until sedation has fully worn off.

**Tube-feeding:** Nil via the tube for the first 4 hours. After 4 hours, commence feeding with feed at 50ml per hour or as per dietitian's regimen.

Medicines: Medication given via the tube should be given in liquid form where possible. Dispersible medicines may be given if dissolved well and flushed with 30 – 50mls of sterile water (hospital). In community use either tap or cooled boiled water. Crushed tablets should never be given and capsules should not be opened and administered via the tube. Please refer to the pharmacist or nurse specialist for advice. The tube is narrow (14fr) and can block easily. Never administer medicines down the balloon port.

**Hygeine:** The patient should **not** have an immersion bath for **2 weeks** following the procedure. Showers are permitted after 24 hours. Ensure that the stoma site is washed first.

**Additional information** is available on intranet under policies and guidelines "Tube Feeding"