Assessment of the resident with a leaking percutaneous gastrostomy tube: cause of leak

Assess for cause of leaking percutaneous gastrostomy tube (PEG / RIG):

Domain		Identification	Management
Device	Tube damaged	• Inspect the tube for cracks, beading, or warping • Fill an ENFit Enteral syringe with warm tap or sterile water. Attach to feeding port and gently flush the tube and check site of leak	Refer to HHS RaSS or HHS Gastrostomy support service
	Tube blocked	• Gently flush tube and assess for resistance / inability to flush	Refer to Percutaneous gastrostomy tubes: Trouble-shooting a blocked Percutaneous Endoscopic Gastrostomy (PEG) / Radiologically Inserted Gastrostomy (RIG)
	Inflation volume of retention balloon less than manufacturer guidance (for devices with balloon)	• Check the retention balloon volume against the volume recommended by the manufacturer and the resident's gastrostomy care plan • Note: once water has been removed from the retention balloon there is high risk of tube dislodgement until the balloon is refilled – avoid this by taping the PEG bolster plate / external flange securely to the resident's skin to ensure that the tube does not accidentally dislodge during balloon check (remove tape after balloon check completed)	Ensure retention balloon volume is as recommended by manufacturer instructions: follow manufacturer instructions on how to do this
	Balloon rupture (for devices with balloon)	• Water withdrawn from the balloon should be clean and transparent – cloudy water may indicate balloon rupture • Diagnose a ruptured balloon by retesting balloon volume 2 to 4 hours from initial test	Refer to HHS RaSS or HHS gastrostomy service where balloon rupture is identified
	Stabilise the device	• Excessive traction or pulling on the device may cause leakage	Stabilise the device as per the resident's gastrostomy care plan and avoid traction / pulling on the device
	Fit of bolster plate / external flange	• Bolster or external flange should rest gently on the skin with only a 3 to 5 mm gap between skin and plate when gentle traction is applied – if it is too loose or too tight, leakage can occur	Check that the bolster / external flange is at the level recorded on the resident's gastrostomy plan; Note: Correct position of the bolster / external flange requires observation of the resident in both lying and sitting positions
	Buried bumper syndrome	Suspect if: • Tube is fixed (unable to push tube in and out: gentle traction should allow the external flange to be lifted 2 to 5 mm from skin) • Abdominal pain and tenderness at site • Increasing volumes of peristomal leakage • Breakdown of skin at site • Bleeding at PEG / RIG site • Recurrent peristomal infections	Refer to HHS RaSS or HHS Gastrostomy Support service
Resident factors	Infection of PEG / RIG site	• Suspect if PEG / RIG site is surrounded by skin that is red, tender and there is purulent discharge (pus)	• Do a swab of the PEG / RIG site and send for microscopy and culture • GP to review and where appropriate prescribe antibiotics or topical anti-fungal agents as appropriate • Ensure implementation of daily care plan for gastrostomy and close monitoring of response to treatment
	Delayed gastric emptying	• Suspect in residents with Parkinson disease, multiple sclerosis, diabetes, residents prescribed opioids or GLP1 analogues	• GP to review indication for opioids where these are prescribed • GP to consider trial of a pro-kinetic agent, e.g. domperidone
	Constipation	• Assess resident for constipation	Refer to the Constipation pathway on how to assess and manage constipation
	Bowel obstruction	• GP to assess resident for potential bowel obstruction: abdominal distension, pain, vomiting and lack of passing of flatus / bowel motions	Where bowel obstruction is suspected, refer to Management of the Resident with unstable vital signs
	Enlarged gastric fistula	• Residents who are very frail, nutritionally deplete and at risk of poor wound healing are at higher risk of an enlarged gastric fistula • The risk of an enlarged fistula is higher if there is inappropriate lateral traction on the feeding tube, causing pressure on the wall of the tract	• Optimise resident nutrition and wound healing • Ensure appropriate securing of the device, avoiding lateral traction
	Rapid weight loss or weight gain	• Review resident weight charts to assess for rapid weight loss or weight gain • Assess fit of the bolster to ensure that this remains appropriate	Refer to a dietitian