Nasal unsedated seated percutaneous endoscopic gastrostomy (nuPEG): a safe and effective technique for percutaneous endoscopic gastrostomy placement in high-risk candidates

We wish to congratulate McCulloch *et al* on introducing the nuPEG approach in high-risk patients, such as those with neurodegenerative

disorders.¹ In turn, we recently adopted this approach but have adapted it to enable a faster procedural time, by using the pull-through technique rather than the Pexact technique described.

As described by McCulloch *et al*, the patient is semi-upright, with pharyngeal local anaesthesia but no sedation. Transnasal endoscopy is done, and for the PEG we use a conventional 15 Fr Freka PEG tubes with a retaining flange. With the endoscope in the stomach, the abdominal wall is punctured under local anaesthetic and the traction thread used for the pull-through is advanced into the stomach. The thread is then grasped in the stomach using paediatric endoscopic biopsy forceps and pulled out through the nostril. A 'nasal-oral' transfer of the thread is then done by exposing the pharynx with a laryngoscope, grasping the thread with Magill forceps and pulling it through the mouth. This then allows a conventional pull-through PEG to be completed.

We have completed three cases in patients with motor neuron disease using this technique; all procedures were completed successfully without complications, and were well tolerated with a total procedure time between 13 and 20 min.

The nuPEG case series described by McCulloch *et al* used only the Pexact device, which does not use a traction thread, and avoids the pull-through step. We also use the Pexact device in our department, although to date have restricted its use to selected cases of head and neck malignancy, which is the principal indication for this technique as per British Society of Gastroenterology guidelines.² Disadvantages of the Pexact procedure include the time required to complete the gastroperxy step prior to PEG placement and the higher risk of later accidental PEG displacement with the balloon retention device. In contrast, the conventional pull-through technique is a

more rapid technique and allows for a more secure disk-retained PEG to be placed. An adaptation of transnasal endoscopy using a nasal-oral transfer to enable a pull-through PEG procedure similar to our technique has been described previously.³

In summary, while fully endorsing the advantages and safety of the nuPEG technique described by McCulloch *et al*, we feel that our adaptation to a conventional pull-through technique represents an important option for improving some outcomes such as procedural time and PEG tube security.

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REFERENCES

- 1 McCulloch A, Roy O, Massey D, *et al.* Nasal unsedated seated percutaneous endoscopic gastrostomy (nuPEG): a safe and effective technique for percutaneous endoscopic gastrostomy placement in high-risk candidates. *Frontline Gastroenterol* 2018;9:105–9.
- 2 Westaby D, Young A, O'Toole P, *et al.* The provision of a percutaneously placed enteral tube feeding service. *Gut* 2010;59:1592–605.
- 3 Gauderer MWL. Conversion of a transnasal PEG to the transoral route. *Gastrointest Endosc* 2004;60.