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Letter to the Editor

Ileal migration of a salivary bypass tube in a dysphagic patient with bipolar disorder



1. Letter to the editor

Salivary bypass tubes (SBT) are funnel-shaped silicone medical devices that are inserted via the oral cavity to be lodged in the pharynx in order to transfer food and saliva directly to the oesophagus. They are essentially used in laryngectomized patients to promote mucosal healing by avoiding salivary stasis, while allowing oral feeding [1].

A 53-year-old man underwent salvage pharyngolaryngectomy without SBT placement in our institution for left supraglottic squamous cell carcinoma. Ten months later, the patient complained of progressive and severe dysphagia. Work-up comprising nasal endoscopy, swallowing study and oesophagoscopy demonstrated abnormal pharyngoesophageal motility and food stasis, suggestive of hypotonia rather than oesophageal stenosis. Oesophageal bougienage was performed and a 12 mm SBT was inserted in order to restore oral feeding. One month later, the patient attended the emergency department reporting absence of stools for 7 days and foul-smelling vomiting for 5 days.

Review of the patient's clinical history revealed severe chronic smoking and drinking, recurrent seizures and bipolar disorder. The patient's treatment essentially comprised two benzodiazepines, two antiepileptics and an antidepressant. Prior to ENT examination, emergency CT scan of the abdomen revealed bowel obstruction caused by ileal migration of the SBT (Fig. 1). Laparoscopic surgery revealed that the SBT had perforated Meckel's diverticulum and

had lodged in the pouch of Douglas. Histological examination of the ileal wall revealed ischaemic lesions in all layers of the ileal wall with a necrotic perimeter at the site of perforation.

The postoperative course was uneventful with resumption of stools within a few days. The patient was exclusively fed by nasogastric tube, which was removed on the sixth day, after which a soft diet with liquids was well tolerated. The patient was discharged from hospital after one week.

2. Discussion

Only several cases of intestinal migration of SBT have been reported in the literature [1,2]. T. Bitter et al. and other teams have recommended systematic fixation of the SBT to a nasogastric tube, the base of the tongue or the nasal septum in order to avoid migration [2–4]. Fixation of the SBT can be useful when only short-term use of the SBT is envisaged, for example to allow wound closure, to prevent stenosis or to allow temporary oral feeding. However, fixation of the SBT in the context of long-term bypass is rarely performed and its value has not been assessed.

Spinelli et al. showed that patients with severe dysphagia could benefit from the use of a SBT for several months [5], or even several years, in our experience. The case reported here is the only case of intestinal migration in a series of 29 SBTs inserted over a four-year period. A possible explanation for this case of migration could be that dysphagia due to hypotonia rather than oesophageal stenosis may not be an appropriate indication for SBT placement, as any additional reduction of muscle tone increases the risk of SBT migration. Chronic and intense use of alcohol and benzodiazepines may also have played a significant role in the patient's postoperative dysphagia and in migration of the SBT by predisposing to relaxation of the muscles of the neopharynx and oesophagus.

In conclusion, when long-term SBT placement is considered, the authors recommend:

- use of the largest possible SBT diameter;
- strict selection of patients with refractory pharyngoesophageal stenosis rather than hypotonia;
- particular caution in chronic users of muscle relaxants.

Disclosure of interest

The authors declare that they have no competing interest.

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Fig. 1. Abdominal CT scan demonstrating the 12 mm salivary bypass tube in the ileum with proximal bowel obstruction (left: sagittal section; right: oblique frontal section).

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