CASE REPORT

Eighty per cent of foreign bodies in the upper gastro-intestinal tract occur in paediatric patients, followed by edentulous adults, prisoners and psychiatric patients. Most objects (80-90%) pass spontaneously, but 10-20% have to be removed endoscopically, and about 1% require surgery.

Objects thicker than 2 cm and longer than 5 cm tend to lodge in the stomach.

Long foreign bodies (>10 cm) tend to lodge in the duodenum, where perforations may develop. In addition to causing ulceration, bleeding and perforation, it is conceivable that they predispose to GOO, as demonstrated in this patient.

The spectrum and size of the foreign body noted on the imaging studies served as the reason for our early recourse to surgery, rather than anticipating the spontaneous passage of these foreign bodies.

Recurrent episodes of foreign body ingestion may occur, especially in prisoners, psychiatric patients and patients with peptic strictures.

References

A midline nasopharyngeal cystic structure — Thornwaldt’s cyst

Ralph Drosten
MB BCh, FCRad Diag
Department of Thoracic Imaging
Brigham and Women’s Hospital
Boston, USA

Case presentation
A 39-year-old woman presented to her doctor complaining of a non-productive cough. On examination, the clinician identified a non-inflamed cystic lesion in the soft tissues of the posterior nasopharynx, slightly to the right of the midline.

Magnetic resonance imaging (MRI) examination of the region of interest confirmed a 12 x 11 mm well-defined cystic lesion in the posterior nasopharynx, slightly to the right of centre. It demonstrated a homogeneously hyperintense signal on T1-weighted images, fat suppression and STIR sequences (Figs 1, 2 and 3). It had a thin wall and did not infiltrate the adjacent soft tissues.

On the basis of these imaging characteristics, the diagnosis of a Thornwaldt’s cyst was made.

Discussion
Thornwaldt’s cyst is a midline congenital pouch or cyst, lined by ectoderm, within the nasopharyngeal mucosal space. It is present in 4% of autopsy specimens and develops from an ectopic portion of notochordal remnants in the nasopharynx. The peak age of presentation is 15-30 years. Clinical symptoms range from being completely asymptomatic and an incidental finding, to persistent nasopharyngeal drainage, halitosis and a foul taste in the mouth. The presenting cough in our patient’s case was presumably secondary to nasopharyngeal drainage and irritation. MRI is the imaging modality of choice. Cysts measure from 1 to 30 mm in diameter and have a high signal intensity on T1 and T2-weighted images, probably
because of proteinaceous fluid content.

Thornwaldt's cyst is thought to be a persistent focal adhesion between the notochord and ectoderm extending to the pharyngeal tubercle of the occipital bone. The notochord remnants occasionally give rise to an epithelial tract which empties into the midline of the nasopharynx. This tract may close over and result in a midline cyst which on occasion may become infected.

The cyst is usually located in the midline in the longis capitus muscle. Extension off the midline is rarely seen. Secondary infection may lead to a syndrome consisting of prevertebral muscular spasm and postnasal discharge. Thornwaldt’s abscess must be surgically drained to prevent extension and retropharyngeal abscess formation.

The differential diagnosis includes a Rathke's pouch — but this lesion occurs in the craniopharyngeal canal, anterior and cephalad to Thornwaldt's cyst.

References