A swallowed fish bone

Case summary

A 19-year-old woman attended the emergency department after swallowing a fish bone while eating dinner. She presented 2 hours after the incident and complained of feeling a foreign body stuck in her mid-throat. A lateral neck radiograph was performed (Fig 1). She had made no attempts to remove the supposedly retained fish bone nor did she vomit prior to the consultation. She had no other significant pain and was afebrile. The emergency department medical officer who examined her could not find a foreign body in her throat. There was no surgical emphysema. What is your diagnosis?

Diagnosis: pharyngo-oesophageal air column

Despite the fact that plain soft tissue neck radiographs are not very useful for detecting fish bones in the throat,[1,2] they are frequently employed in the management of affected patients. This probably results from a combination of medicolegal considerations and the usual lack of a better alternative diagnostic tool in the emergency room. While a poor choice for finding a fishbone, this simple test can detect an important complication caused by swallowed foreign bodies, namely pharyngeal or oesophageal perforation.

FIG 1. Soft tissue neck X-ray of a patient complaining of a foreign body sensation in mid-throat after swallowing a fish bone

FIG 2. Normal neck X-ray of the same patient taken 3 hours after the first one

A quick glance at the plain radiograph in the case described above revealed the presence of retropharyngeal free gas, implying pharyngeal/oesophageal perforation due to the swallowed fish bone. The ear, nose and throat (ENT) surgeon was consulted. A repeated physical examination by the duty ENT surgeon again revealed no fish bone in the patient's throat. When the plain radiograph was checked more thoroughly, it was noticed that the hyoid bone and the laryngeal cartilage were elevated. Together with the mismatch between the clinical and radiological findings, this indicated the 'retropharyngeal free gas' was really swallowed air in the pharynx. This was confirmed by repeating the plain X-ray 3 hours later (Fig 2), by which time there were no abnormalities. The patient's symptoms effectively subsided 12 hours later, which is typical of mucosal ulceration due to spontaneous passage of a foreign body.[3] Figure 3 shows a lateral neck radiograph of another patient who suffered from a swallowed foreign body causing pharyngeal perforation. A semi-

FIG 3. Foreign body at C6 with retropharyngeal free gas in another patient

radiopaque foreign body is seen at C6 and there is retropharyngeal free gas.

SK Ng, FRCSEd(ORL)
Michael CF Tong, MD
E-mail: mtong@cuhk.edu.hk
Department of Otorhinolaryngology, Head and Neck Surgery
Prince of Wales Hospital
The Chinese University of Hong Kong
Shatin
Hong Kong

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