

“I’ve Got a UFO Stuck in my Throat!” – An Interesting Case of Foreign Body Impaction in the Oesophagus

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ABSTRACT

This is a case report of an elderly lady with odynophagia because she accidentally swallowed a tablet which was still wrapped in its blister pack. A discussion of foreign body ingestion, particularly in the elderly, is included. To the authors’ knowledge, this is the first paper that includes a lateral cervical radiograph of an ingested blister pack^(1,2).

Keywords: blister pack ingestion, lateral cervical radiograph, foreign body oesophagus, elderly, odynophagia

INTRODUCTION

In Singapore adults, the majority of ingested foreign bodies are food components, with fish bones being by far the most common. A prospective study of ingested foreign bodies in Singapore by Lim et al showed that non-food foreign bodies comprised only 3.3%⁽³⁾. We present a case report of an elderly patient who accidentally swallowed a blister pack.

CASE REPORT

A 72-year-old mentally sound Chinese lady with high blood pressure and hypercholesterolaemia presented to her general practitioner complaining of discomfort and a sensation of something stuck in her throat after taking her medication that night. He referred her to the Accident and Emergency Department. She gave a history of consulting a doctor recently about pain shooting down her legs and had been prescribed tablets packed in blister packs. She had cut these into individual blisters for convenience of storage. That morning she added it to the container which she usually used for keeping her medication to be taken at night. That evening, as usual, she poured all the medication from the container directly into her mouth and swallowed them with water. She immediately felt a sensation of the pills stuck in her throat. She gave no past history of dysphagia and denied forgetting to remove the pill from the blister pack.

No foreign body was visible on indirect laryngoscopy. Laryngeal rub and the swallowing test were negative. However, a space saucer shaped foreign body was demonstrated on the lateral cervical X-ray at the level of C7 (Fig 1).

At rigid oesophagoscopy, a tablet in its blister pack (Fig 2) was removed from the lumen of the oesophagus 21 cm from the incisors. She was well post-operatively and was discharged two days later.

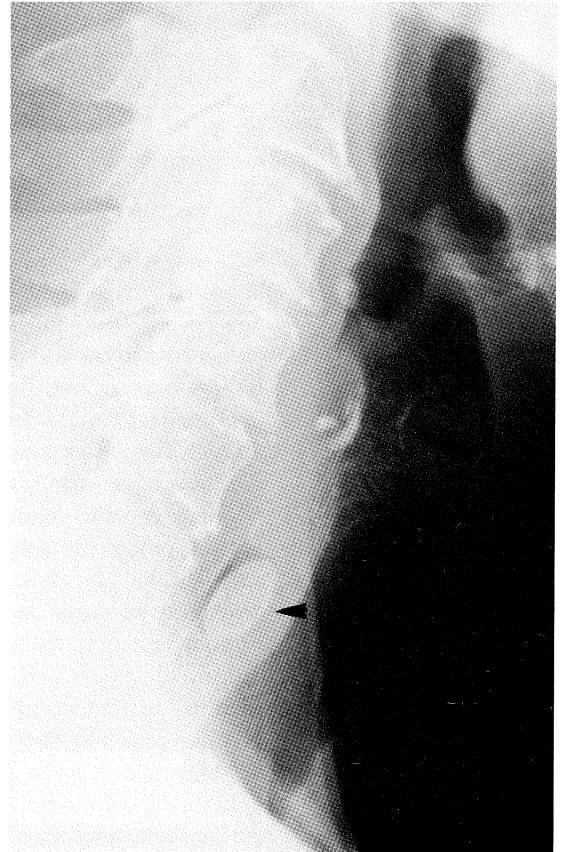


Fig 1 – Lateral cervical X-ray showing foreign body in cervical oesophagus

DISCUSSION

The ingestion of blister packs is a rare problem. A search of the current literature revealed only 2 other reported cases of blister pack ingestion, both accidentally occurring in the elderly^(1,2). Diagnosis of this condition requires an index of suspicion.

The history and clinical examinations usually alert the clinician to the presence of an impacted foreign body⁽⁴⁾. The patient usually complains of sudden onset of pain or discomfort in the throat or chest after swallowing some tablets, inability to finish the meal, progressive or worsening symptoms, severe pain at rest and dysphagia.

Visualisation of the pharynx/hypopharynx by indirect laryngoscopy or flexible nasopharyngoscopy may reveal the foreign body or just pooling of saliva in the pyriform fossae. Pain with drinking (swallowing test) or with moving the trachea and/or larynx in a side-to-side motion (tracheal rock/laryngeal rub) suggests the presence of a foreign body⁽³⁾. No single

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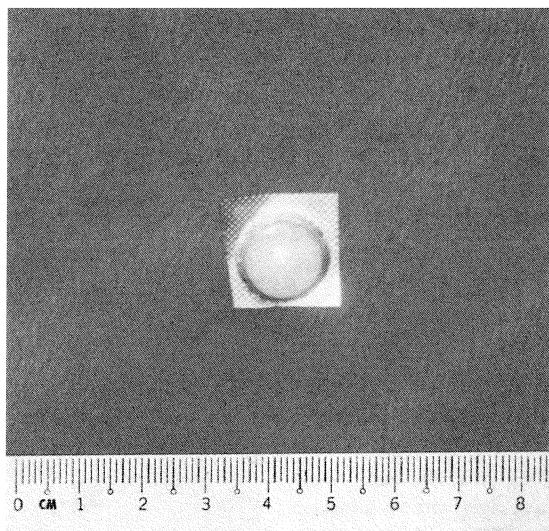


Fig 2 – Picture of blister package removed from patient's oesophagus

feature is a good predictor for the presence of an impacted foreign body. In Singapore, lateral neck X-rays have been useful in fish bone impactions and particularly in cervical oesophageal foreign bodies⁽³⁾. Barium swallows or CT scans are used where thoracic oesophageal foreign bodies are suspected. Press through blister packaging for pills is being increasingly used by drug companies as a safe and hygienic method of storage and dispensation of medication. Such packs not only protect the tablet from the effects of moisture and light, but also allow quick and easy counting for dispensing purposes. An interesting benefit reported is the reduction in the number of pills swallowed in drug overdose cases, probably related to the extra effort required to remove such packaging compared to pouring loose pills direct from a bottle⁽⁵⁾.

These blister packs are generally made of plastic and sealed with a foil of aluminium. Some have perforations which allow individual pills to be broken off easily. The pill our patient swallowed did not have such a perforation but was cut into a single square of foil and tablet pack. It was unexpected that the pack showed up on X-ray, as aluminium has a low radiodensity and is ten times less absorptive than steel. The minimal thickness of steel detectable *in vivo* is 0.12 mm⁽⁶⁾. Fortunately, the X-ray of the blister pack with the pill was taken exactly side on, and this, combined with the radiographic exposure resulted in the interestingly shaped foreign body found on the lateral cervical X-ray.

In general, intentional foreign body ingestion is most frequently reported in adults with psychiatric disorders or mental retardation, and also in inmates of prisons⁽⁷⁾. A mental state screen, the ten item Elderly Cognitive Assessment Questionnaire (ECAQ)⁽⁸⁾, was done retrospectively in our patient. She scored 7 out of 10 which showed that she was essentially still in possession of her mental faculties.

Blister pack ingestion does occur in the mentally sound and accidental foreign body ingestion of non-food origin is usually related to carelessness, failing vision and alcohol intoxication. In the elderly, being

edentulous is a risk factor as dentures reduce the natural ability of the teeth and palate to feel for foreign bodies⁽³⁾. They are also a group in whom polypharmacy is common due to ill health. With more tablets being packed in blister packs, the issue of medication in the elderly should be addressed by the attending doctor.

We present suggestions on how to prevent blister pack ingestion and management of suspected cases in the elderly. With increasing age and decreasing cognitive skills, the elderly should have well-laid out charts⁽⁹⁾ on which, when and how much of each medication to take (a sample of such a chart is reproduced in Fig 3). They should also be encouraged to use specially labelled air-tight pill boxes for pill storage instead of containers such as cups or small plastic boxes. Blister packed medication should not be cut up into small ingestible squares. The medications should be removed the night before ingestion and prepared in the pill boxes by a reliable relative. Manufacturers can help by making packages harder and more difficult to cut. Pill packaging should come with prominent warning labels advising against cutting up blister packs.

Medicine (Attach with cellophane tape)	Indication	☀️ 早上 Morning	☀️ 中午 Noon	🌆 傍晚 Evening	🌙 晚上 Night

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Fig 3 – Medication chart for the elderly

In the management of patients having dysphagia or odynophagia after swallowing pills, the practitioner should be alert to the possibility of blister pack ingestion and should take a careful history, asking about previous dysphagia, habits with regards to medication use and pill storage and how they deal with the blister packs. A brief mental screen, such as the ECAQ, should be part of the examination, and if it is impaired, should alert the clinician to the possibility of blister pack ingestion.

CONCLUSION

Blister pack ingestion, though rare in incidence, is expected to increase with increasing use of such packaging and also with the rising elderly population in our country. The general practitioner should advise the patients on simple safety measures when pills packed in blister packs are prescribed. The emergency room physician and otolaryngologist should remember to specifically ask for a detailed history in all patients who complain of odynophagia or dysphagia after swallowing pills.

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Safety Alert for Low Molecular Weight Heparins and Heparinoids

1. The US FDA has issued an alert to physicians warning of a serious safety problem with Low-molecular-weight heparins following reports of epidural or spinal haematomas, some of which have resulted in long-term or permanent paralysis in patients receiving such products concurrently with spinal or epidural anaesthesia, or spinal puncture.
2. FDA's alert was prompted by more than 30 reports, received as of November 1997 describing the development of such haematomas, some of which resulted in prolonged or permanent paralysis. Approximately 75% of the patients were elderly women undergoing orthopaedic surgery.
3. At this point of time, FDA believes practitioners should be aware of the following points when using these products:
 - a. When neuraxial anaesthesia (epidural/spinal anaesthesia) or spinal puncture is employed patients anticoagulated or scheduled to be anticoagulated with low molecular weight heparins or heparinoids for prevention of thromboembolic complications are at risk of developing an epidural or spinal haematoma which can result in long-term or permanent paralysis.
 - b. The risk of these events is increased by the use of indwelling epidural catheters for administration of analgesia or by the concomitant use of drugs affecting haemostasis such as NSAIDs, platelet inhibitors, or other anticoagulants. The risk also appears to be increased by traumatic or repeated epidural or spinal puncture.
 - c. Patients should be frequently monitored for signs and symptoms of neurological impairment. If neurologic compromise is noted, urgent treatment is necessary.
 - d. Practitioners should consider fully the potential benefit versus risk before neuraxial intervention in patients anticoagulated or to be anticoagulated for thromboprophylaxis.

The FDA Talk Paper and Letter to Doctors are available from:
The Pharmaceutical Department, MOH, Tel 325 5606, Fax 222 6797
The FDA Talk Paper is also accessible via Internet at:
<http://www.fda.gov/medwatch.safety/1997/antico.html>