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Bay-leaf: an unusual oesophageal foreign body

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Abstract
Bay-leaf as a foreign body causing oesophageal obstruction has rarely been reported. We present two such cases, and review their management.

Key words: Oesophagus; Foreign body.

Introduction

Foreign body in the oesophagus is a common clinical problem, and various foreign bodies have been described in the literature as well as their management reviewed (Nandi and Ong, 1978; Taylor, 1987; Webb, 1988).

In this country very little has been reported in the literature about bay-leaf impaction causing oesophageal obstruction. This seemingly benign object can cause potentially serious morbidity. We report two cases of a bay-leaf as a foreign body in the oesophagus.

Case reports

Case 1

A 58-year-old man was referred to us from the casualty department. It was his birthday, and his wife had prepared for him his favourite meal of lasagne. While eating his supper, he felt that something had slipped down his throat, and immediately afterwards, he felt great discomfort in his upper throat in the midline. He was unable to finish his meal, although he did manage to drink water with some difficulty. On questioning he denied that there was any bone or gristle in the meal, as it was a vegetarian lasagne. When seen at the ENT department, he was retching and complained of a discomfort in his throat, together with dysphagia which was not total. There was nothing significant in his past history.

On admission to the hospital, the patient was in good general condition. ENT examination was normal, except that on indirect laryngoscopy, a dark object was partly visible just behind the arytenoids, in the hypopharynx. An X-ray of the soft tissue of the neck did not show any abnormality.

The patient was informed of the findings and told that an endoscopy would be necessary. He was reluctant, however, to undergo a general anaesthetic. As he was very co-operative, it was decided that an attempt should be made to remove the foreign body under direct vision after his throat had been sprayed with 2 per cent xylocaine. Using a Mackintosh laryngoscope, the laryngopharynx was inspected. A piece of a leaf was found sitting partly in the hypopharynx but the main part was lodged in the upper oesophagus. The leaf was grasped with a McGill's forceps and gently removed. The patient did not feel any great discomfort during the procedure. On inspection, the foreign body was found to be a whole bay-leaf. His wife then mentioned that she had used a whole bay-leaf during cooking but thought that she had removed it before serving the meal.

The patient immediately felt better and managed to eat and drink without much difficulty. He was discharged, and was well when seen at follow up two weeks later.

Case 2

The second patient was a 67-year-old women, who choked on her food whilst eating at a restaurant. On admission, she complained of sensation of a foreign body in her throat, but denied having eaten any fish or meat at the time the incident happened. She was retching, had almost complete dysphagia and was drooling saliva. There were no respiratory complaints. She had had good health in the past.

Indirect laryngoscopy examination showed pooling of saliva. There was no other abnormal ENT findings and her chest was clear. A soft tissue X-ray of the neck did not show a foreign body.

A presumptive diagnosis of foreign body in the oesophagus was made and the patient was prepared for an oesophagoscopy under general anaesthetic. However, two hours later while she was waiting for her operation, she retched strongly and brought up a piece of bay-leaf. Immediately afterwards, she was relieved of all her symptoms, and was able to swallow her saliva without difficulty. A barium swallow examination did not show any abnormality. She made an uneventful recovery.

Discussion

Oesophageal impaction and obstruction due to bay-leaf has scarcely been reported in the English literature (Panzer, 1983; Belitsos, 1990; Buto *et al.*, 1990). Perhaps the first report was in a letter to the editor (Panzer, 1983) by a doctor who described an episode of bay-leaf impaction in herself and subsequently had to undergo oesophagoscopic removal under general anaesthesia.

Buto *et al.* (1990) reported the first series of five patients, of which three were male and two female with an age range of 46 to 90 years. In four out of five patients, the impaction was an isolated event with no prior history of oesophageal symptoms. All the patients had a normal looking oesophagus as seen on endoscopy.

Neither of our patients had ever had any oesophageal symptoms in the past, and this was an isolated incident. It is possible that the serrations in the leaf together with a stiff stem, if one is present, make it likely to impact into the mucosal recesses. It is then unlikely to be dislodged distally into the stomach by the peristaltic movement of the oesophagus. One patient (case 2) in our study did dislodge the foreign body by the force of retching.

Due to the stiffness and rigidity of the stem of a bay-leaf, it may act as a sharp penetrating object. In one case report (Belit-

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sos, 1990), the leaf had cut into the musculature of the oesophagus. This may lead to the potentially serious complications of perforation, mediastinitis and abscess formation. In view of the above possibilities, bay-leaf impaction in the oesophagus if diagnosed requires urgent attention and removal.

Buto *et al.* (1990) have described their approach to the management of this problem. They advise removal of the foreign body if found lodged in the hypopharynx, and we concur with this view. Bay-leaf in the oesophagus can either be retrieved or pushed into the stomach. However, those with stems can act as a sharp pointed object and these are best removed endoscopically, as there has been a report of lower gastrointestinal complications (Palin and Richardson, 1982).

It is conceivable that oesophageal impaction with bay-leaf is more common than it is reported to be (Panzer, 1983; Buto *et al.*, 1990). The clinician and consumer of spicy foods should be aware of this hazard.

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