Transcervical foreign body

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Abstract

The uncommon occurrence of acute retropharyngeal abscess in adults can be the result of a retained foreign body. A large piece of wood impacted in the neck in a road traffic accident and presenting as retropharyngeal and bilateral parapharyngeal abscesses is reported for its rarity and clinical interest.

Key words: Foreign bodies; Neck; Retropharyngeal abscess

Introduction

Non-tubercular retropharyngeal abscess in adults is rare. Such an abscess caused by a trans-cervical foreign body is perhaps unknown. We report a case of non-metallic foreign body (piece of wood) impacted in the neck presenting with features of retropharyngeal and parapharyngeal abscesses on both sides.

Case report

A 35-year-old male truck driver had a road traffic accident and sustained injuries on the right side of the neck. The patient was initially managed in a highway health centre where the wound was cleaned and stitched and a broad spectrum antibiotic prescribed. The patient, however, had difficulty in swallowing and his neck movements were painful and stiff. Six days after his injury the patient was managed at another hospital where the stitches were removed from the neck wound and about 250 ml of pus drained, which relieved the patient of dysphagia and pain, but neck movements remained stiff. The patient after that was, variously managed for about a month with antibiotics and dressing although the pus discharge from the neck wound continued. At this stage the patient presented to SMHS Hospital with complaints of dysphagia, pain in the neck and stiff neck movements. X-ray soft tissues of the neck showed a large prevertebral soft tissue shadow consistent with an abscess. No foreign body was visualized (Figure 1).

Hypopharyngoscopy at this stage revealed an oedematous posterior pharyngeal wall which when incised did not reveal any purulent collection. Exploration of the neck wound on the right side did not reveal any foreign body. The patient was started on broad spectrum antibiotic therapy (I/V ceftrioxone and metronidazole). A small swelling developed on the left side of his neck behind the sternomastoid muscle and progressively increased in size and was tender. Repeat internal drainage of the retropharyngeal space and aspiration of the neck swelling on the left side revealed about 10 ml of pus from each site. There was some relief from dysphagia but neck movements continued to be painful and stiff, in spite of broad spectrum antibiotic cover. Repeat X-ray soft tissues of the neck showed a persistent and increased pre-vertebral soft



Fig. 1

Lateral X-ray soft tissues of the neck showing increased prevertebral soft tissue shadow.

tissue shadow. A computed tomography (CT) scan of the neck showed a large hypodense area in the retropharyngeal space extending into the left parapharyngeal space at the level of the sixth and seventh cranial vertebra. The surrounding muscle and soft tissue showed moderate enhancement with contrast (Figure 2).

Under general anaesthesia neck exploration was undertaken on the left side using a vertical incision along the posterior border of the sternomastoid muscle. A single

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 $Fig.\ 2$ Contrast enhanced CT scan at $C_6,\ C_7$ level showing a large 'hypodense' area.

large $10\,\mathrm{cm} \times 3\,\mathrm{cm}$ piece of wood (Figure 3) was found under the sternomastoid, partly embedded in the retropharyngeal space at the level of the hypopharynx. There was considerable induration and oedema and a small amount of pus in the tissues, but no visceral injury. The patient had an uneventful recovery and was discharged from the hospital after $10\,\mathrm{days}$.

Discussion

A foreign body may rarely find its way into the retropharyngeal space after accidental or deliberate ingestion or be associated with a penetrating neck wound. Abscesses of deep neck spaces and consequent mediastinitis can complicate such an occurrence. These patients usually present with pain and stiffness in the neck, dysphagia and generalized symptoms such as malaise and pyrexia. The present case, in addition, had recurrent pus discharge from the right neck wound not completely responding to antibiotics. Exploration of this wound, however, did not reveal a foreign body since it had already migrated deeper into the retropharyngeal and left parapharyngeal spaces. Swelling of the posterior pharyngeal wall is usual in retropharyngeal abscess with, or without, a foreign body.

A lateral neck X-ray is considered to be the most reliable method of establishing the diagnosis of a retropharyngeal abscess.³ Although widening of prevertebral

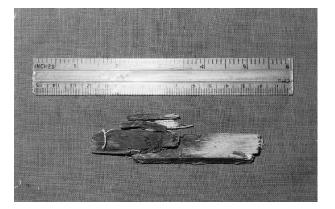


Fig. 3 The foreign body, a 10 cm \times 3 cm piece of wood, after removal.

soft tissue shadow and localized gas shadow are usual (Figure 1), a radio-opaque foreign body can sometimes be demonstrated as well.² Wood being radiolucent was not demonstrated in this case, partly accounting for the delay in diagnosis. CT scan easily demonstrated the localized non-enhancing hypodense area in the retropharyngeal and left parapharyngeal space suggesting a radiolucent foreign body (Figure 2).

Drainage of acute retropharyngeal abscess and removal of a foreign body can be performed by an internal or external route. ^{4,5} An earlier attempt at endoscopic incision and aspiration of the retropharyngeal swelling in the present case did not reveal any pus possibly because it was still a cellulitis associated with the foreign body.

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