Case report

An unusual foreign body migrating through time and tissues
Basile N Landis* and Roland Giger

Address: Service d'ORL et de Chirurgie cervico-faciale, Hôpitaux Universitaires de Genève, Switzerland
Email: Basile N Landis* - Basile.Landis@hcuge.ch; Roland Giger - Roland.Giger@hcuge.ch
* Corresponding author

Abstract

Background: Beside infections, foreign body incidences are amongst the most frequently encountered pathologies in pediatric otolaryngology. While inhaled foreign bodies represent an acute emergency, symptoms of ingested foreign bodies sometimes appear with some delay. Typically fishbones tend to go unnoticed in a first examination and become symptomatic by fever, odynodysphagia and torticollis. Exceptionally, foreign bodies migrate and become manifest with a considerable delay.

Case report: We present a case of a young girl who presented with an unusual foreign body which migrated through the cervical tissues causing repeated cervical tumescence's before being diagnosed.

Conclusion: Repeated cervical abscesses or tumescence's in children or young patients should alert the treating physician to seek for an underlying pathology such as unnoticed foreign bodies or malformations (e.g. cysts). Further the scarce literature on these migrating foreign bodies is discussed.

Background

The most frequent ingested foreign bodies in the Ear Nose and Throat sphere are chicken and fish bones [1]. The symptoms are immediate and patients quickly seek for medical help after a few unsuccessful trials to extract the foreign body by themselves. Beside the tonsils, the base of the tongue and the upper esophagus are the places where usually the impacted foreign bodies are found [1]. Their removal is essential to prevent super-infections, abscesses and perforations with potentially life threatening mediastinal complications in case of esophageal foreign bodies [2]. Although rarely, foreign bodies sometimes migrate within the tissues and become symptomatic after a certain time lapse [3]. In those cases, the direct relation between the suspected foreign body ingestion and the first symptoms is rarely established due to the latency and unusual clinical presentation [4,5].

Case report

We report the case of a 4-year old girl who was admitted to our ENT outpatient clinic with a cervical neck mass without other signs and symptoms. The patients history revealed, that she had previously been treated several times for odynophagia with cervical tumescence within the last two month. Symptoms and swelling disappeared temporally after the antibiotic treatments. However, the cervical mass rapidly reappeared after the end of the treatment. Otolaryngological examination showed no particularity, beside a firm lateral cervical mass. A cervical CT scan (Fig 1a) revealed a deep subcutaneous collection, suggesting the presence of an cervical abscess. Potential
Impacted foreign bodies within the ENT sphere, typically fish bones, have been reported to cause upper respiratory airway tract abscesses [8]. However, the migration through the entire pharyngeal wall ending in a superficial cervical abscess several months later is uncommon but has to be considered [1,5,9,10]. Repeated abscesses which seem resistant to treatment should always evoke the possibility of a foreign body or an underlying congenital malformation such as branchial cleft cysts [8], even if radiological examination fails to evidence its presence. While FB migration has been reported in adults [1,9], the present case reports this rare complication in a child. Particularly, the FB’s nature – a grass blade – seems uncommon, even amongst adult reports [9]. Even though a glass blade is not solid or hard, depending on the ingestion angle, it can exhibit a considerable sharpness. In the present case this might have facilitated the initial tissue penetration.

Similar to foreign bodies in the ear [11] or nose [12], ingested FB in children are prone to lead to chronic and delayed symptoms [3]. Thus the possibility of a ingested foreign body should always been considered even when initial investigations where negative.

References
1. Chee LW, Sethi DS: Diagnostic and therapeutic approach to migrating foreign bodies. Ann Otol Rhinol Laryngol 1999, 108:177-180.
2. Brinster CJ, Singhal S, Lee L, Marshall MB, Kaiser LR, Kucharzuk JC: Evolving options in the management of esophageal perforation. Ann Thorac Surg 2004, 77:1475-1483.
3. Gilchrist BF, Valerie EP, Nguyen M, Coren C, Kloz D, Ramenofsky ML: Pearls and perils in the management of prolonged, peculiar, penetrating esophageal foreign bodies in children. J Pediatr Surg 1997, 32:1429-1431.
4. Tsunoda K, Sakai Y, Watanabe T, Suzuki Y: Pseudo vocal paralysis caused by a fish bone. Lancet 2002, 360:907.
5. Barzilai G, Braverman I, Karmeli R, Greenberg E: How did it get there? A coiled metal foreign body in an unusual cervical position. Otolaryngol Head Neck Surg 2001, 124:590-591.
6. Cheng W, Tan PK: Foreign-body ingestion in children: experience with 1,265 cases. J Pediatr Surg 1999, 34:1472-1476.
7. Wadie GM, Konefal SH, Dias MA, McLaughlin MR: Cervical spondylodiscitis from an ingested pin: a case report. J Pediatr Surg 2005, 40:593-596.
8. Nusbaum AO, Som PM, Rothschild MA, Shugar JM: Recurrence of a deep neck infection: a clinical indication of an underlying
congenital lesion. Arch Otolaryngol Head Neck Surg 1999, 125:1379-1382.

9. Gertner R, Bar’el E, Fradis M, Podoshin L: Unusual complication of an ingested foreign body. J Laryngol Otol 1991, 105:146-147.

10. Kumar BN, Walsh RM, Courteney-Harris RG: Laryngeal foreign body: an unusual complication of percutaneous tracheostomy. J Laryngol Otol 1997, 111:652-653.

11. Jegoux F, Legent F, Beauvillain de Montreuil C: Chronic cough and ear wax. Lancet 2002, 360:618.

12. Botma M, Bader R, Kubba H: 'A parent's kiss': evaluating an unusual method for removing nasal foreign bodies in children. J Laryngol Otol 2000, 114:598-600.