Case Report

A rare nasopharyngeal foreign body (detached beverage can stay-tab): A case report✩✩✩

Hidayatullah Hamidi, MD, Mohammad Saboor Rastin, MD∗

Department of Radiology, French Medical Institute for Mothers and Children (FMIC), Kabul, Afghanistan

ARTICLE INFO

Article history:
Received 9 August 2022
Revised 24 August 2022
Accepted 28 August 2022

Keywords:
Nasopharyngeal foreign body
Nasopharynx
Rare
Case report

ABSTRACT

Foreign body ingestion and inhalation is a very common problem in children while nasopharyngeal foreign body aspiration in children is rare but can present; therefore, timely diagnosis of the nasopharyngeal foreign body is crucial and vital for the patient. Authors present a rare case of nasopharyngeal foreign body (detached beverage can stay-tab) in 1-year-old male child. Authors suggest that although nasopharyngeal foreign body aspiration is a rare entity, but should be considered as a crucial diagnosis in pediatric patients with history of foreign body aspiration.

© 2022 The Authors. Published by Elsevier Inc. on behalf of University of Washington.

This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

Background

There have been more than 12,000 reported cases of aspirated foreign bodies in pediatrics in peer-reviewed literature that required bronchoscopic removal [1]. Foreign body ingestion and inhalation is a very common problem in children but nasopharyngeal foreign body aspiration in young aged children is rare and very uncommon [2]. Patient’s history, reported symptoms and imaging are the clinically made suspicions for nasopharyngeal foreign body, but bronchoscopy is used for definite diagnosis and removal of foreign body [1].

Case presentation

A 1-year-old male child referred with history of foreign body ingestion 2 months before, complaining from recurrent snoring. Neck and chest CT was performed for localization of the foreign body according to the ordering physician. The CT scan exam was performed by 128 MDCT. The images revealed normal tracheo-bronchial tree without evidence of foreign bodies and as well as both lung parenchymas were well-aerated without underlying pathology (Figs. 1A and B). Neck and nasopharyngeal images were also reviewed; it was...
Fig. 1 – (A and B) VRT reconstructed images: Stuck foreign body-detached beverage can stay-tab (blue arrows) in the nasopharyngeal lumen.

Fig. 2 – Computed tomography scan of nose and paranasal sinuses parasagittal cut showing the location of the foreign body (blue arrow) in the nasopharynx.

Surprisingly seen that an abnormal metallic opacity with well-defined margins stuck in the nasopharyngeal lumen (Figs. 2 and 3). The virtual rendered technique (VRT) reformatted images (Figs. 4A and B) demonstrated the stuck foreign body was detached beverage can stay-tab (Fig. 5) which was retented in the nasopharyngeal lumen, although these pull tabs are designed to remain safely attached to the rest of the can, but they can be broken off.

**Discussion**

Aspirated foreign bodies in children present with most signs and symptoms that are nonspecific, and in unwitnessed aspiration cases, the diagnosis might be delayed, which increases morbidity and the likelihood of chronicity [1]. Self-inserted foreign bodies in the upper aero-digestive tract are common in children because they are habitually inquisitive for their natural body orifices [3]. The presence of the foreign body in nasopharynx is a rare entity [2]. Children younger than 3 years have a normal developmental curiosity and independence associated with reduced parental supervision. Altogether, these factors place them at an increased risk of foreign body aspirations; this age group has been shown to account for approximately 75% of reported cases [1]. In our case, there was unique type foreign body (detached beverage can stay-tab) present in nasopharynx.

In literature search, very few reports of nasopharyngeal foreign body lodgment is present, the reported cases involved small objects such as a ring, a tooth, a leech, and even a fish [1].
Fig. 3 – (A and B) Computed tomography scan of nose and paranasal sinuses axial cut showing the location of the foreign body (white arrows) in the nasopharynx.

Fig. 4 – (A and B) Computed tomography scan of neck and chest in lung windows demonstrating normal luminal appearance of tracheo-bronchial tree without presence of any foreign body.

Fig. 5 – Detached beverage can stay-tab.

The clinical presentation and rarity of the type and location of the foreign body in this case merits wide attention.

Conclusions

In conclusion, we emphasize that although nasopharyngeal foreign body aspiration is a rare entity, but should be considered as a crucial diagnosis in pediatric patients with history of foreign body aspiration, complaining from recurrent snoring and persistent signs and symptoms such as vomiting.

Patient consent

I, the principle author, have received permission from my patient to publish this case as a case report, and my patient has no problem with the publication of the case.
REFERENCES

[1] Alshehri WM, Al-Qahtani B. A rare incidental finding of a foreign body in the nasopharynx during adenotonsillectomy. Case Rep Otolaryngol 2018;2018:8361806.

[2] Thakkar H. Foreign body metal safety pin in nasopharynx. Indian J Clin Pract 2020;30:9.

[3] Jotdar A, Dutta M, Mukhopadhyay S. Nasal foreign body, dislodged and lost—can the adenoids help? J Clin Diagn Res 2015;9(6):MD06.