

Nasal Foreign Body Presenting as Unilateral Headache

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We report a 6 year old female child, who presented with history of right sided recurrent headache for four months. On diagnostic nasal endoscopy, a metallic foreign body was seen impacted between superior turbinate, middle turbinate and nasal septum which was removed using pediatric nasal endoscope. Following removal, the symptom of unilateral headache subsided. Possibility of a foreign body should always be ruled out while evaluating a child with recurrent, unilateral headache.

Key words: Foreign body, Nose, Secondary headache, Unilateral headache.

The commonest presentation of unilateral nasal foreign body in pediatric age group is unilateral recurrent rhinitis, unilateral purulent foul smelling rhinorrhea, and unilateral epistaxis. They are usually reported early by patient or relatives of patient to treating clinician and are managed appropriately. Nasal foreign bodies includes button cells, stones, beads, nuts, seeds, small erasers and toy parts. We report a child who presented with unilateral headache and the diagnosed only after months of impaction to have an atypical foreign body in nose.

CASE REPORT

A 6-year old girl was referred from a general practitioner with complain of right sided recurrent headache since four months. She had no similar complain before that. Her visual acuity and CNS examination was normal. On anterior rhinoscopic examination, scanty, blood stained muco-pus was seen in right nasal cavity. Roentogram of the skull demonstrated presence of a metallic foreign body in right nasal cavity. Endoscopic examination was suggestive of presence of some impacted, metallic foreign body in right nasal cavity, between superior turbinate, middle turbinate and nasal septum. There was no nasal septal deviation. Foreign body (rusted metallic screw) was then removed under general anesthesia using pediatric 0 degree nasal endoscope. After removal of foreign body, patient was relieved of headache. Retrospectively patient gave history that she had accidentally introduced foreign body (screw) in her right nostril while playing but she did not tell to any one at that time due to fear and later on she forgot the incidence. Patient is on regular follow up since one year and is well.

DISCUSSION

In this patient, even though, the foreign body was there in the nasal cavity for four months and was causing recurrent headache, yet it remained undiagnosed due to its unexpected presentation.

The mechanism involved in headache due to foreign body in nose can be explained by the fact that pressure exerted on sensory nerves of adjacent lateral wall, can produce pain [1]. This concept was first elaborated by Sluder, and the resultant condition has been called 'The anterior ethmoidal nerve syndrome' [2]. In addition to their direct neurological effects, reflex changes perhaps



FIG. 1 X-ray AP and lateral view of Skull demonstrating the foreign body (metallic screw).

may result from septal deformities, which affect nasopulmonary and nasal reflexes.

McAuliffe, *et al.* studied the sensitivity of the nasal cavities and the paranasal sinuses using mainly faradic stimulation and found that the lateral wall of the nasal cavity was much more sensitive than the septum [3]. Clinical studies show that the very severely impacted nasal septum can exert pressure on the more sensitive structure of the lateral nasal wall and cause referred trigeminal pain and chronic headache [4].

Thus, when a pediatric patient presents with such a history, appropriate radiological evaluation should be carried out and thorough nasal endoscopic examination has to be performed to reach the correct diagnosis and appropriate management of patient.

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Evolving Biliary Atresia with Cytomegalovirus

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Multiple studies have been conducted to demonstrate the role of viruses in causing biliary atresia. Although *cytomegalovirus* (CMV) is known to cause intrahepatic bile duct destruction, its role in biliary atresia is not proven. We report two cases of CMV infection, initially presenting with intrahepatic cholestasis, who subsequently developed biliary atresia.

Key words: *Biliary atresia, CMV, Liver biopsy*

Extrahepatic biliary atresia (EHBA) occurs in 1 in 10,000 live births, more commonly in Asians. 65-90% of EHBA cases are post-natal, and in these, a role for infectious agents in causing bile duct obliteration is suggested [1]. Although cytomegalovirus (CMV) is known to cause intrahepatic bile duct destruction and paucity, its role as a cause of EHBA has been a topic of much debate.

Over a period of 2 years, 32 EHBA cases were seen at our Pediatric Hepatobiliary Clinic. Out of the 13 who were tested for associated CMV infection, 11 tested positive for

CMV either by positive CMV IgM or CMV PCR (Polymerase Chain Reaction) [2]. We present two cases of cholestatic jaundice, tested positive for CMV and had rising titres of CMV IgG on follow-up. Although the biliary tree was found to be patent at presentation, both children subsequently developed biliary atresia.

CASE REPORT

Case 1: A 5 months old infant, exclusively breastfed, immunized and well-developed for age, presented with jaundice since birth with high coloured urine without clay colored stools. On examination she had jaundice with