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CORPUS ALIENUM NASAL SINISTRA : CASE REPORT

Rachel Ratu[1], Muhammad Fajar Ramadhan Isryal[2]
Doctor Profession Study Program, Faculty of Medicine, Tarumanagara University Jakarta[1]
Ear, Nose and Throat Surgery Specialist, Head and Neck Surgery, Tzu Chi[2] Hospital, Email: rahel14032001@gmail.com, sekretariat@rscktzuchi.co.id

ABSTRACT

Foreign bodies are one of the emergency cases in ENT where 19% of cases are located in the nose, which mostly occurs in children under five years. There are two types of foreign bodies, namely exogenous and endogenous. There are factors that can make it easier for foreign body aspiration such as personal factors, failure of normal protective mechanism, physical factors, incomplete swallowing, psychological factors and the nature of the foreign body. The process of removing foreign objects in the nose requires adequate lighting, caregiver if the patient is less cooperative, the use of cotton tampons, suction, bayonet forceps, alligator forceps and if available a nasal endoscope that is better at imaging and magnifying to identyfing the exact pathological condition

KEYWORDS *Nasal foreign bodies, children, endoscopy*

INTRODUCTION

A foreign object in an organ is an object that comes from outside the body or from inside the body that normally does not exist (Hampry et al., 2023). There are two types of foreign bodies, namely exogenous and endogenous. Exogenous foreign bodies are foreign bodies that enter through the nose or mouth such as solids, liquids and gases. Solid foreign bodies are classified into two, namely organic in 25% of cases and inorganic in 74% of cases. Examples of solid foreign bodies are nuts and bones. Solid foreign bodies that are inorganic are nails, nails, pins, stones and others. The next exogenous foreign body that is liquid such as chemicals. Endogenous foreign bodies are foreign bodies that come from inside the body such as thick secretions, blood or blood clots, pus, periction, amniotic fluid and meconeum (RK & Yadav, 2021; Soepardi & Iskandar, 2001).

Foreign body cases account for 30% of ENT emergencies where 19% are located in the nose. Cases mostly occur in children under 5 years old (84%) and as many as 73% in children less than 3 years old. There are factors that facilitate the occurrence of foreign object aspiration such as personal factors (age, gender, occupation, social conditions, place of residence), failure of normal protection

mechanisms (sleep state, decreased consciousness, alcoholism), physical factors (neurological disorders or diseases, incomplete swallowing process in children), psychological factors (emotions, psychological disorders) and the nature of foreign objects.

Foreign bodies in the nose can enter through several routes, namely from the anterior nares (most often), choanae (usually food) and through puncture wounds (Mazumder et al., 2017). In children, foreign objects in the nose come from toys, small household appliances and food. The most frequent location for foreign objects is found in media containers. Some foreign bodies can cause congestion and edema of the nasal mucosa so that it can result in pressure necrosis forming ulceration, erosion and epistaxis (Kwon et al., 2022). Retention of secretions caused by foreign bodies can decay along with ulceration which can cause foul odor and discharge from the nose (caused by organic foreign bodies). Foreign objects originating from battery stone buttons contain types of heavy metals such as nickel, cadmium and lithium. This substance can cause some site-dependent lesions with intense local tissue reactions as well as liquefaction necrolysis which can lead to septal perforation, synecia and stenosis of the rice cavitas.

RESEARCH METHOD

This research uses a descriptive case study approach that aims to analyze in detail the handling of Corpus Alienum Nasal Sinistra cases in a pediatric patient at Tzu Chi Cinta Hospital. Data was collected through a series of procedures, including anamnesis, physical examination, and supporting examination using nasal endoscopy. Anamnesis was taken to determine the history of foreign body entry, symptoms experienced, and the patient's health condition before the incident. Physical examination includes inspection through anterior rhinoscopy to detect any structural changes or inflammation due to the foreign body trapped in the nasal cavity.

In the diagnosis procedure, nasal endoscopy techniques are used to confirm the location and characteristics of the foreign body more accurately. Laboratory tests were also performed to evaluate the patient's general condition before further medical treatment. As the patient is a child and less cooperative, the foreign body extraction procedure is performed under general anesthesia to avoid the risk of excessive bleeding and the possibility of more extensive tissue trauma (Baranowski et al., 2023). During the extraction procedure, medical tools such as bayonet forceps, alligator forceps, and suction techniques are used to remove the foreign body with minimal trauma.

Once the foreign body is successfully removed, the patient undergoes post-operative monitoring to evaluate the recovery process. A follow-up examination was performed one week after the procedure to ensure there were no complications such as tissue granulation, septal perforation, or secondary infection. The patient showed good clinical improvement and had no residual complaints. This study shows that the nasal endoscopy technique is an effective method in the diagnosis and extraction of foreign bodies in the nasal cavity, while minimizing the risk of postoperative complications. Thus, the results of this study can serve as a reference for medical personnel in dealing with similar cases in the future.

RESULT AND DISCUSSION

A 3-year-old and 8-month-old girl came to the Tzu Chi Cinta Hospital (RSCK) polyclinic on December 5, 2024 at 14.00 with the main complaint of a dice-shaped bead entry in the left nose since 1 week before entering the hospital. At that time the patient was playing and accidentally entered the beads, the patient was alone. One day before entering the hospital, the patient's caregiver told the parents that the child's left nose looked like there was a foreign object. Patients also complained of a smelly nose since the entry of a foreign object and felt blocked. Complaints accompanied by a cold since 3 days after the entry of a foreign object accompanied by a greenish-colored secretion, thick consistency. Complaints of fever and cough are denied. The patient has never experienced similar complaints before, has no history of allergies to the weather, cold, dust or cigarette smoke. The patient has never been treated for complaints of foreign objects in the nose. On a daily basis, the patient has a habit of eating three meals a day with varied side dishes, the patient's history of growth and development is good according to age.

In the physical examination of the patient, mental compost consciousness, pulse frequency 100 x/minute, respiratory rate 25 x/minute, temperature 36.8 °C and oxygen saturation of 99% at room temperature were obtained. In anthropometric measurements, a body weight of 13.3 kg, a height of 94 cm and normal nutritional status were obtained. On the physical examination of anterior rhinoscopy a normal, symmetrical shape was obtained, an image of a foreign body was obtained in the left nasal inferior conch, there was a greenish secretion on the right nose, the inferior conca of the right and left hyperemic nose, there was no fluid coming out of the nose. In laboratory examination, hemoglobin was obtained 10.7 g/dL, hematocrit 31%, leukocytes 6,470/µL, platelets 161,000/µL, bleeding time 1'30" minutes, blood glucose (GDS) 85 mg/dL. A nasal endoscopic examination was also carried out and there was an image of a foreign body on the left nose, greenish in the shape of a cube.

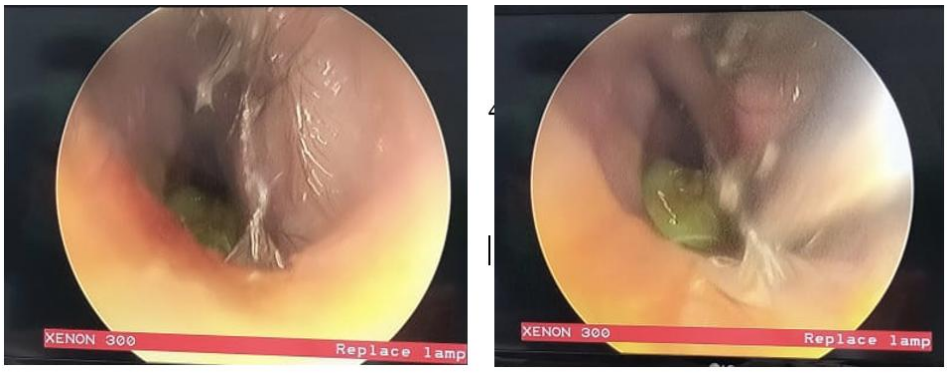

Figure 1. ENT Endoscopy Examination

Based on the anamnesis, physical examination and supporting examinations that have been carried out, the patient's diagnosis is corpus alienum nasal sinsitra.

Then the patient is advised to perform foreign body extraction with general anesthesia as soon as possible on December 6, 2024 at 09.00 WIB because the patient is less cooperative and avoids excessive bleeding and the onset of granulated tissue after foreign body extraction. Medicamentosa therapy given as preoperative prophylaxis is in the form of 500 cc lactate ringer infusion fluid, ceftriaxone 1x1 gram intravenously. When the extraction was carried out, the foreign body in the nose was successfully removed, there was no excessive bleeding and no granulation tissue was found after 1 week the foreign body was found in the nose.

Figure 2. Foreign Object Extraction Actions

Figure 3. Post Foreign Object Extraction Operation

One week after surgery, the control patient goes to the ENT polyclinic. The patient showed clinical improvement and had no nose-related complaints.

Figure 4. One Week Control Post Extraction of Foreign Bodies

Discussion

In this case report, we got a case of a foreign object that had been in the nose for 1 week and immediately carried out further management. In the study conducted by Sharma et al, the study of foreign bodies on the nose that had been removed consisted of twenty-one beads, eleven pearls, eleven peas, eleven seeds, nine sponges, eighteen stones, six crayons and one battery stone. The most common object is beads (Sharma, R., & Malhotra, 2021).

The procedure for picking up foreign objects in the nose requires sufficient lighting. Companion assistance to hold the patient. On foreign objects in the nose, cotton tampons containing 1:100,000 epinephrine are placed on the rice cavitation for 5 minutes to increase the visibility of the removed and evaluated surface. Foreign objects are removed using suction, forceps bayonet, forceps alligator, Kelly tonsils, picks and steel ear tips. In addition, foreign body identification in addition to anterior rhinoscopy can also be done using nasal endoscopy.

In this case, we use a nasal endoscopy to perform the examination and extraction of foreign bodies. Nasal endoscopy has made it easy to diagnose pathological conditions in the nose over the past few years. Nasal endoscopy is a minimally invasive examination in outpatient patients. Nasal endoscopy offers the advantages of examining nasal architecture ranging from the nasal mucosa, synosal anatomy and pathological conditions to the nose. Nasal endoscopy comes in two types, namely *flexible fibreoptic endoscope* and *rigid endoscope* , both of which are well tolerated. Nasal endoscopy can save money because it can reduce the cost of more expensive examinations such as CT scans and MRIs when they are not needed. The main advantage of using nasal endoscopy is the imaging and magnification it provides. This helps to show the patient the right pathological condition and explain the next management. Nasal endoscopy is also an excellent tool for teaching and documentation. There are many options for nasal endoscopes, namely rigid endoscopes with 0,30,45,70,90 and 120 degrees (Mehta, 2022; RK & Yadav, 2021; Suraneni et al., 2019).

In addition, it is also thought to be useful in taking biopsy preparations from suspected lesions. Thus, nasal endoscopy has evolved as a tool with a dual role in diagnosing diseases and planning treatment and post-treatment examinations. After the extraction of the foreign body in this case, a nasal examination using endoscopy was carried out, no granulation tissue, lacerations and open wounds were found in the cavum area of the rice. There is no bleeding and no perforation of the rice septum area. After one week, the control patient was given a field rice cavum, no lacerations and blood clots.

CONCLUSION

Foreign bodies in the nose are one of the emergencies in the field of ENT. All

patients who complain of unilateral nasal discharge with or without a history of foreign body entering the nose require prompt and appropriate investigation and treatment. Anamnesis, physical examinations, and supporting examinations such as nasal endoscopy can be very helpful for surgeons in understanding and treating various nasal pathologies. With fast and appropriate management, foreign body complications in the nose can be minimized, thereby reducing complications of infection, bleeding and anatomical abnormalities.

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