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Case Report

A Cavum Cyst: A Case Report at the Nianakoro Fomba Hospital in Segou

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Abstract

Cavum cysts, or nasopharyngeal cysts, are rare benign lesions, often of congenital origin, developing in the nasopharynx. Their discovery is frequently incidental during radiological or endoscopic examinations due to their asymptomatic nature. However, when they are large or poorly localized, they can cause symptoms such as nasal obstruction, rhinorrhea, recurrent serous otitis, or swallowing disorders. From an etiopathogenic perspective, they can result from the persistence of embryonic structures such as the Tornwaldt duct or from glandular obstruction. Diagnosis is primarily based on imaging, particularly MRI, and treatment is primarily surgical. This study reports a clinical case observed in the ENT department of Nianankoro Fomba Hospital in S égou. This is a 7-year-old boy who has been suffering from inspiratory dyspnea, nasal obstruction, mouth breathing, postnasal drip, and nocturnal snoring for the past year. Clinical examination reveals good general condition but failure to thrive. Nasofibroscopy identifies a smooth, rounded, fluctuating mass partially occupying the cavum. Bilateral serous otitis media is also found on otoscopy. X-rays show a retronasal fluid-filled swelling. Endoscopic nasal excision is performed under general anesthesia. The postoperative course is favorable, with resolution of obstructive symptoms within the first few days. Histopathological analysis confirms a benign mucosal cyst. No signs of recurrence have been observed after six months of follow-up. This case illustrates the importance of endoscopic and radiological diagnosis in symptomatic forms of cavum cysts, and the good response to minimally invasive surgical treatment.

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Keywords

Cavum Cyst, Snoring, Nasal Obstruction

1. Introduction

Cavum cysts, also called nasopharyngeal cysts, are rare benign lesions, most often congenital in nature, which originate in the nasopharynx region. Their discovery is usually fortuitous, during radiological or endoscopic examinations performed for other reasons, due to their asymptomatic nature in the majority of cases [1]. However, when they reach a significant size or when they are poorly positioned, they can cause various clinical signs, including nasal obstruction, rhinorrhea, recurrent serous otitis or swallowing disorders [2].

Etiopathogenically, these cysts can result from the persistence of embryonic remains such as the Tornwaldt duct, or from glandular retention secondary to obstruction of the mucous glands of the nasopharynx [3]. Diagnosis is essentially based on imaging, particularly MRI, which allows the cystic nature of the lesion and its extent to be characterized. Treatment is generally surgical, via the endonasal or transoral route depending on the location and size of the cyst [4].

Through this clinical observation, we report a case of symptomatic cavum cyst treated in our department, highlighting the diagnostic and therapeutic particularities.

2. Methodology

This is a retrospective, observational study of a clinical case of cavum cyst diagnosed and treated in the ENT department of the Hospital Nianankoro Fomba de Segou. Clinical, paraclinical (nasal endoscopy, radiographic imaging of the cavum), therapeutic and evolutionary data were collected from the patient's medical file, with their informed consent.

3. Result

Clinical Observation

This is a 7-year-old male child with a history of repeated episodes of serous otitis who consulted for inspiratory dyspnea for 1 year associated with posterior rhinorrhea, nasal obstruction, mouth breathing, intercostal indrawing with xyphoid funnel (Figure 1) and nocturnal snoring evolving for several months. No febrile episode or pharyngeal pain was reported.

On general examination, the child is in good general condition, but has delayed height and weight development compared to his age.

ENT examination: The nasal cavities were clear on anterior rhinoscopy. Nasofibroscopy revealed a smooth, rounded, well-defined mass, partially filling the cavum, with a fluctuating, non-inflammatory consistency. On otoscopy, the eardrums appeared bilaterally retracted, consistent with serous otitis.

The radiography of the cavum revealed a swelling at the level of the posterior wall of the nasopharynx with liquid content (Figure 2).

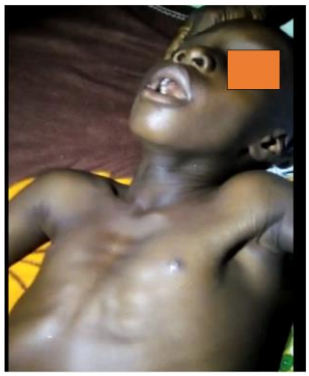

Figure 1. *In the sleeping patient, we observe intercostal indrawing and xyphoid funnel.*

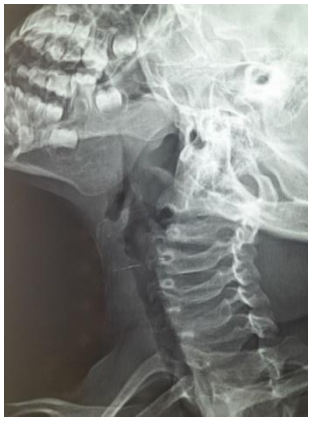

Figure 2. *A cystic mass on a lateral cervical radiograph.*

Following the preoperative assessment, a decision was made for endoscopic nasal surgery. The patient was operated on under general anesthesia. The mass was completely excised without any intraoperative complications. The anatomopathological study of the surgical specimen concluded that it was a mucosal cyst with no signs of malignancy.

The postoperative course was uneventful, with disappearance of obstructive signs within the first few days. The six-month follow-up showed no clinical or radiological recurrence.

4. Discussion and Comments

Cavum cyst, although rare in children, is a benign pathology whose symptoms can be insidious and prolonged. In our observation, the patient presented a clinical picture dominated by chronic inspiratory dyspnea, nasal obstruction, posterior rhinorrhea and signs of upper respiratory failure, evolving over several months. This picture is suggestive of nasopharyngeal obstructive syndrome, frequently caused in children by adenoid hypertrophy, but which should also suggest other etiologies, notably cystic or tumoral [5].

Cavum cysts, most often of the mucosal or retention type, develop from the accessory salivary glands of the nasopharynx. They can remain asymptomatic for a long time, but when they reach a significant size, they cause obstruction of the upper airways, nocturnal ventilation disorders, and in some cases, otological complications such as serous otitis, which was the case in our patient [6, 7]. The association with chronic mouth breathing and height-weight development disorders underlines the potential impact of this pathology on the growth and quality of life of the child [8].

Endoscopic examination by nasopharyngeal fibroscopy allowed a precise topographic diagnosis, revealing a smooth, rounded, non-inflammatory mass in the nasopharynx. This examination remains the diagnostic tool of choice for exploring cavum pathologies in children, making it possible to differentiate chronic adenoiditis, a cyst, or other nasopharyngeal masses such as juvenile nasopharyngeal fibroma or rarer tumors [9].

Imaging, particularly X-rays of the cavum or MRI in case of diagnostic doubt, plays a complementary role in assessing the extent of the mass and its nature. In our case, the X-ray showed a fluid swelling consistent with a cystic formation.

Surgical treatment, via nasal endoscopy, has allowed complete excision of the lesion, with simple postoperative course and rapid disappearance of symptoms. This type of treatment is recommended in cases of marked symptoms or otological complications [10]. The risk of recurrence after complete excision is low, but clinical and endoscopic monitoring is recommended in the medium term [11].

5. Conclusion

This case highlights the importance of considering cystic lesions of the cavum in the presence of any chronic nasopharyngeal symptoms, especially in the absence of fever or acute infectious signs. Nasopharyngeal endoscopy should be used systematically in the exploration of this type of clinical picture, in order to avoid diagnostic and therapeutic delays.

Abbreviations

ENT	Ear, Nose, and Throat
MRI	Magnetic Resonance Imaging

Conflicts of Interest

The authors declare no conflicts of interest.

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