

## Nasal Septal Abscess: A Case Report

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### Abstract

The case of a patient with a septal abscess is reported, with the aim of providing a comprehensive analysis of the diagnostic approach and the various stages of treatment, as well as prompting in-depth reflection on the implications that this particular case could have for medical practice in general. It also highlights the vital importance of early recognition of this condition, and of responding rapidly and appropriately to the patient's needs. It also highlights the value of clinical experience in improving the management of similar cases in the future.

**Keywords:** Septal abscess; abscess drainage; antibiotics, a case report.

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## INTRODUCTION

Nasal septal abscess is an uncommon condition, but it can lead to potentially serious complications that require prompt and appropriate medical intervention. This condition usually occurs as a result of a local bacterial infection and can be linked to certain risk factors, including a history of chronic rhinitis, seasonal allergies and inappropriate use of self-medication. It's essential to take this condition seriously because of its

health implications, and to consult a healthcare professional at the first sign of symptoms.

## CLINICAL CASE

This is a 30-year-old patient with no pathological antecedents of note, presenting with bilateral nasal obstruction and anterior rhinorrhea in a febrile setting for three days. Rhinoscopy and scannographic imaging revealed a nasal septal abscess Figure 1:

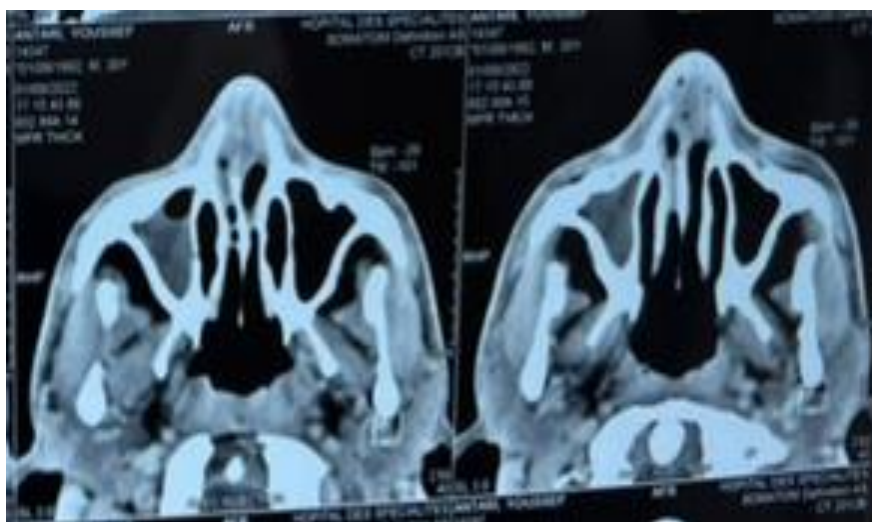


Figure 1: Axial section naso-sinus CT scan showing septal abscess

**Therapeutic Intervention:**

The treatment included surgery to drain the abscess, combined with triple antibiotic therapy. This therapeutic approach proved effective, and the patient's condition improved significantly in just ten days. Furthermore, the etiological analysis suggested a possible origin of the infection linked to a dental problem. This case study underlines the importance of early recognition of septal abscesses, and highlights the effectiveness of a multidisciplinary therapeutic approach in their management.

**DISCUSSION**

Nasal septal abscess, although rare, remains a potentially serious condition that can occur at any age. It is often associated with a variety of risk factors, including nasal drug use, trauma to the nose, dental infections, as well as certain pre-existing medical conditions such as diabetes and immunosuppression [1].

Our case highlights the crucial importance of early recognition, accurate diagnosis and prompt action to avoid serious complications.

Diagnosis of nasal septal abscess is based on a combination of clinical signs, such as intense nasal pain, nasal septal deformity, fever and nasal congestion. Endoscopic examination often plays a key role in identifying the accumulation of pus in the septal region. Confirmation of the diagnosis is usually obtained through imaging tests, notably computed tomography (CT) of the nose, which can visualize the location and extent of the abscess [2].

Treatment of nasal septal abscesses involves a combination of broad-spectrum intravenous antibiotic therapy and surgery to drain the abscess. The aim of surgery is to evacuate the pus, restore the integrity of the nasal septum, and prevent the infection from spreading. Close collaboration between ear, nose and throat (ENT) specialists and radiologists is essential for effective management of this condition [3].

One of the feared complications of nasal septal abscess is orbital cellulitis, which can lead to severe vision loss. A recent study by Smith *et al.*, (2020) highlights the importance of routine ophthalmological assessment in patients with nasal septal abscess, to detect potential ocular damage at an early stage [4]. Another

possible complication is septal osteomyelitis, which may require prolonged management and close monitoring.

**CONCLUSION**

This is a rare and serious infection of the nasal septum. This new case of a rare nasal septal abscess gives us the opportunity to describe the different etiologies, their management, and to insist on preventive treatment of this infection.

**Patient Perspective:**

Before admission and in the operating room, the patient was given an explanation of the procedure in order to obtain her consent. Objective abnormalities and risks associated with anesthesia and surgery were explained to her.

**Ethics Declarations:**

**Informed Consent:** A written informed consent, dated and signed, was obtained from the patient.

**Conflict of Interest:** The authors declare no conflict of interest.

**Ethics Approval Obtained:** This study was approved by: Mohammed V university in Rabat; morocco.

**Authors' Contributions**

All authors have contributed to the management of the patient and have read and approved the final version of the manuscript.

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