Case Report

Rebellious headache revealing an extensive rhinoscleroma: A case report and review of the literature

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ABSTRACT

Introduction: and importance: this case report aimed at an unusual case of extensive rhinoscleroma with a literature review. We report this case to bring attention to the patients with immunodeficiency problem regardless of presenting symptoms. Case presentation: a 70-year-old patient with diabetes and hypertension, consulted for chronic median and posterior headaches have not improved with symptomatic treatment. She reported cacosmia without rhinorrhea and right otalgia. The examination of the nasal cavity showed a bleeding lesion on the lateral wall of the nasopharynx. CT-scan of the facial showed tissue lesion on the posterior and lateral walls of the nasopharynx, with infiltration of the parapharyngeal space and bone lysis right edge of the clivus. The biopsy confirmed the diagnosis of rhinoscleroma. The patient started the ciprofloxacin for 3 months, and the evolvement was noticed with the disappearance of the lesion during the first month of treatment. Cilinical discussion: rhinoscleroma is a chronic and progressive granulomatous disease of the nasal cavities. The diagnosis is confirmed by the search for bacteria and an anatropathological assessment of MIKULICZ cells. The medical treatment of choice has a high concentration in macrophages such as rifampicin and fluoroquinolone. Conclusion: rhinoscleroma is a granulomatous disease caused by klebsiella rhinoscleromatis, you must think about in front a nasopharyngeal lesion imitating a malignant pathology.

1. Introduction

Known since VON HEBRA in 1870, it is a condition characterized clinically by a granuloma with a pseudo-tumor development, the pathogen of which is Klebsiella rhinoscleromatis [1].

It develops in the nasal cavity in 95% of cases [2], but it can be localized in other sites of the respiratory tract. Its diagnosis remains histological by the demonstration of Mikulicz cells (1876) [3]. Its treatment is mainly medical, rigorous and prolonged monitoring. We report this case to bring attention to the patients with immunodeficiency problem regardless of presenting symptoms. This case report is in line with the SCARE criteria [4].

2. Case presentation

This is a 70-year-old patient, a housewife, of low socio-economic level, known diabetic under insulin therapy and hypertensive, a consultant for chronic headaches (4 months) median and posterior, not improved by symptomatic treatment. Associated with cacosmia without rhinorrhea and right earache. The ear, nose, and throat examination revealed an ulcerative budding tumor in the posterior wall of the nasopharynx, bleeding on contact, measuring 2 cm with a normal appearance of the rest of the nasal mucosa (Fig. 1) and chronic otitis media serum-mucous otitis type.

The remainder of the physical examination was normal, especially the cranial pairs and lymph node areas. The clinical examination could not differentiate between malignant or benign cause. Paranasal computed tomography (CT) scan (showed thickening of the right...
posterolateral wall of the cavum measuring 35x20x19 cm enhanced after injection of literally extended PDC infiltrating parapharyngeal fat and lysis of the clivus posteriorly (Fig. 2 and Fig. 3). The biopsy under sedation, performed by an assistant professor (8 years of experience), concluded with the diagnosis of rhinoscleroma (Fig. 4 and Fig. 5).

A serological test (HIV and syphilis) was normal. The patient was out corticosteroid therapy 1mg/kg for 5 days and ciprofloxacin 500 mg x 2 per day for 4 months. The evolution was good with the disappearance of the nasopharyngeal tumor with a follow-up of 1 month in the hospital via patient interview and physical examination, however, the intensity of headaches has decreased and not disappeared and a control paranasal CT-scan showed a slight reduction of tumor mass (Fig. 6).

3. Discussion

Rhinoscleroma is a chronic and progressive granulomatous disease of the nasal cavities and upper respiratory tract, first described by Ferdinand Von Hebra in 1870 [1], caused by a bacterium klebsiella rhinoscleromatis identified by Von Frisch in 1882 [5].

Rhinoscleroma is found mainly in rural areas with poor socio-economic conditions. Rhinoscleroma is endemic in parts of Africa (Egypt, tropical regions), Southeast Asia, Mexico, Central, and South America, Central, and Eastern Europe with increased incidence in Spain due to new immigrants from endemic areas [6]. It is rare in Western Europe [7].

Patients of all races can be affected. Rhinoscleroma generally affects women more than men in some publications while others report on gender predominance [8], primarily young adults in the third and fourth decades of life [9]. The transmission of this pathology is through the air facilitated by poor hygiene, malnutrition and humans are the only identified host.

The nasal cavity is the site most often involved (95–100%), followed...
by the nasopharynx (18–43%), larynx (15–40%), trachea (12%) and bronchi (2–7%) [10]). More unusual locations are reported: sinuses lacrimal tract, middle ear, orbit and endocranium [11].

The rhinoscleroma has an affinity for the nasal mucosa, usual in the areas of epithelial transition especially the junction area of the buccal stratified squamous epithelium and the nasal ciliary epithelium, whereas pharyngeal scleroma is usually located at the junction of the respiratory and squamous oropharyngeal epithelium [12].

The evolution of scleromas occurs slowly and insidiously in 3 stages: catarrhal (exudative), proliferative (granulomatous), and cicatrical (scleromatous) [13]. Our patient was seen at the proliferative stage, the clinical and endoscopic signs being nonspecific, the diagnosis is confirmed by the search for the germ using a culture of nasal secretions and by an anatomopathological study by highlighting specific cells of MIKULICZ which are histiocytes incapable of destroying Klebsiella rhinoscleromatis [14].

CT-scan of the paranasal was performed to explore the unusual headache the patient-reported revealing a nasopharyngeal tumor with lysis of the clivus.

The therapeutic management of rhinoscleroma is essentially medical, which consists of prolonged systemic antibiotic therapy for several months, since Klebsiella rhinoscleromatis is an intracellular bacterium whose medical treatment of choice is that which has a high concentration in the blood cells macrophages like rifampicin and fluoroquinolone [15].

The duration of treatment is not codified, various authors recommend its use for 6 weeks to 6 months or more, until the cultures and pathological examination are negative [16].

For our patient, we used ciprofloxacin at a dose of 500 mg twice daily for 3 months, followed by histological and CT-scan monitoring to reassess bone lysis.

Long-term follow-up is necessary to monitor the reactivation of the disease after treatment with improved health conditions.

4. Conclusion

Rhinoscleroma is a chronic granulomatous disease of insidious appearance caused by the bacteria klebsiella rhinoscleromatis facilitated by poor hygiene and immunosuppression [17] and which can cause bone damage.

Think about it even in the presence a bone lesion or associated with a tumor pathology.

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