CASE STUDY

Abscess Secondary to Tophaceous Gout: A Rare Cause of Parotid Region Tumour

Absceso secundario a tofo gotoso: una causa rara de tumoración en la región parotídea

Juan Jose Góngora Lencina, a,∗ Juan García-Valdecasas Bernal, a Mercedes Caba Molina, b Manuel Sainz Quevedo a

a Servicio de Otorrinolaringología, Hospital Universitario San Cecilio, Granada, Spain
b Servicio de Anatomía Patológica, Hospital Universitario San Cecilio, Granada, Spain

Received 28 March 2012; accepted 19 June 2012

Clinical Case

We present the case of a 74-year-old woman, who came to emergency services due to the sudden appearance of a mass at the right lateral cervical level 2 days earlier. The most relevant personal history data were: diabetes mellitus type 2, hypertension, dyslipidaemia and chronic kidney disease Stage IV (with normal serum levels of uric acid for the previous 8 years).

The patient did not report fever, dysphagia, odynophagia, dyspnoea or dysphonia. However, she did indicate pain with palpation of the lesion.

In the physical examination, we did not observe any other alterations at the buccal oropharyngeal, laryngeal or cavity levels.

The most significant data from analyses were leukocytosis with left deviation, as well as elevated CRP; the other figures were as expected considering her base condition. Computed axial tomography (CAT) scan revealed a nodular lesion with increased uptake in the right parotid space (Fig. 1). The fine-needle aspiration biopsy (FNAB) performed later yielded the diagnosis of abscess secondary to deposits of monosodium urate crystals (Fig. 2).


∗ Corresponding author.
E-mail address: juanjogongora@gmail.com (J.J. Góngora Lencina).

2173-5735/$ - see front matter © 2012 Elsevier España, S.L. All rights reserved.
Figure 2  Micro-photography of the material obtained using FNAB and prepared with Papanicolaou staining. The monosodium urate crystals are stained red.

The patient was treated with ceftizoxime pivoxil and deflazacort and the lesion subsided in the successive days, as shown via sonography. To date, she has had no relapse.

Discussion

Gout is a metabolic disease that affects approximately 1% of the population. It is characterised by the deposit of monosodium urate crystals in joints, tendons, heart valves and eyes (among other sites), caused by an alteration that is primary or secondary to other diseases. The most frequent ENT location is the pinna and there is no published literature on cervical deposits.  

It is a disease whose gold standard diagnosis is the presence of monosodium urate crystals in the aspirate of tophus or joint liquid. When it is not possible to perform this test, a good approximation for diagnosis is the detection of hyperuricaemia and the clinical and radiological signs that the patient reveals.  

Tophaceous gout classically appears after years of acute gouty clinical results; there are very painful, rapidly occurring attacks, most often at night. However, it is true that the isolated appearance of a tophus can be the first indication of the disease.  

The most important imaging tests to perform in this location are the CT scan, nuclear magnetic resonance (NMR) and the sonography. The CT is capable of revealing deposits of monosodium urate crystals in joints and tissues, while these are detected earlier and with greater precision, in limits and characteristics, using NMR. Sonography represents an interesting test, given its complete lack of radiation, limited invasion and low price, while it likewise detects monosodium urate deposits.

In the differential diagnosis with other diseases susceptible to cervical appearance, it is important to perform a thorough exploration of the ENT area. Nasal fibroptic endoscopy can be useful, above all if malignancy is suspected. The FNAB, which is an inexpensive, rapid and bloodless test, has become the gold standard for anatomo-pathological diagnosis and can be used in the thyroid, salivary glands, cervical masses and adenopathy.

Let us now focus on the various masses that can appear at the parotid level: infections can have multiple origins, from tuberculosis, parotitis and sialadenitis to parotid abscesses and others. The background condition of the first branchial arch should also be taken into consideration. Among benign cancers, pleomorphic adenoma and Warthin’s tumour stand out from the rest. With respect to the malignant ones, skin cancers can also be the origin of lesions in the parotid area. This is equally true of lymphomas. Among salivary gland cancers, mucoepidermoid and cystic adenoid carcinomas should be emphasised, as they are the first and second malignant tumours in frequency, respectively.

The case history, physical examination and, above all, high-capture CT images and the appearance of crystals in the FNAB would differentiate it from all these cases.

Treatment is based on the use of non-steroid anti-inflammatories as the first-line attack, glucocorticoids as the second choice and colchicine as the third option. For our patient, we included a wide-spectrum antibiotic, given the signs of abscessed infection that she presented.

The clinical picture that we present represents the first case to be diagnosed as tophus of a cervical location that does not have any relation to laryngeal structures,\(^1\) spinal cord\(^1\) and the temporomandibular joint.\(^6\)

The patient’s personal history and concomitant condition, the location, radiological image and the anatomo-pathological image above all mean that we are facing a unique case, of which we have not found any references or similarities in the current medical literature.

Conflict of Interests

The authors have no conflicts of interest to declare.

References