

IMAGES IN PAEDIATRICS

Recurrent ranulas: What is the diagnosis?

Ránulas recidivantes: ¿cuál es el diagnóstico?

Joana Baptista de Lima^{a,*}, José Banquart Leitão^b, Carla Zilhão^{a,c}, Sérgio Alves^{a,c}^a Servicio de Pediatría, Centro Materno-Infantil do Norte (CMIN), Unidad Local de Salud de Santo António (ULSSA), Oporto, Portugal^b Servicio de Cirugía Pediátrica, Centro Materno-Infantil do Norte (CMIN), Unidad Local de Salud de Santo António (ULSSA), Oporto, Portugal^c Servicio de Reumatología Pediátrica, Centro Materno-Infantil do Norte (CMIN), Unidad Local de Salud de Santo António (ULSSA), Oporto, Portugal

Available online 21 June 2025

We present the case of a girl aged 9 years referred to our department of pediatric surgery due to recurrent swelling at the base of the tongue with onset five months prior. The examination revealed a fluid-filled tumefaction (Fig. 1). The histopathological assessment confirmed the presence of a unilocular mucous retention cyst with chronic sialadenitis, including acinar atrophy, ductal ectasia and lymphoplasmacytic infiltration. An MRI scan showed bilateral small cysts in the sublingual glands, consistent with simple ranulas, and a multicystic appearance of the parotid glands suggestive of benign lymphoepithelial lesions associated with Sjögren syndrome (SS) (Fig. 2). Laboratory tests revealed elevation of antinuclear antibodies (1:640), high anti-SSA antibody levels (>240 U/mL), and mild elevation of rheumatoid factor (32 IU/mL). Other tests, including serum angiotensin-converting enzyme, protein electrophoresis, immunoglobulin subclasses, complement levels, cryoglobulins, anti-dsDNA, anti-SSB, and anti-U1RNP, were all within normal ranges. The Schirmer test confirmed



Figure 1 Fluid-filled swelling at the base of the tongue.

severely decreased tear production (<5 mm). The patient later developed sicca syndrome, which improved with symptomatic treatment.

Sjögren syndrome is a rare autoimmune disease in pediatric patients, and its early diagnosis can be challenging. Recurrent ranulas may be an early manifestation of duc-

DOI of original article:

<https://doi.org/10.1016/j.anpedi.2025.503806>

* Corresponding author.

E-mail address: u14122@chporto.min-saude.pt

(J. Baptista de Lima).

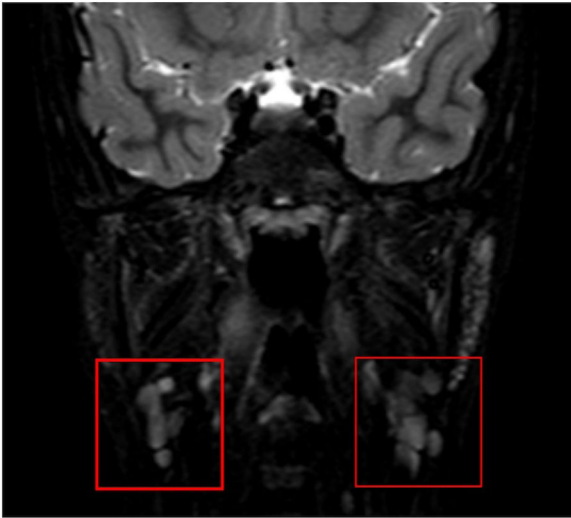


Figure 2 Multicystic appearance of the parotid glands on MRI.

tal damage in SS.^{1,2} Therefore, in these cases, imaging of the salivary glands and comprehensive immunological studies should be considered to assess for underlying conditions such as SS.³

References

1. Chen N, Zeng DS, Su YT. Role of ranulas in early diagnosis of Sjögren's syndrome: a case report. *World J Clin Cases*. 2021;9:5701–8, <http://dx.doi.org/10.12998/wjcc.v9.i20.5701>. PMID: 34307628; PMCID: PMC8281396.
2. Takagi Y, Hashimoto K, Katayama I, Eida S, Sumi M. Juvenile primary Sjögren's syndrome with ranula: is ranula a clinical sign that leads to early detection of Sjögren's syndrome? *Oral Radiol*. 2021;37:328–35, <http://dx.doi.org/10.1007/s11282-020-00473-8>. Epub 2020 Aug 16. PMID: 32803681; PMCID: PMC7985099.
3. Takagi Y, Katayama I, Eida S, Sasaki M, Shimizu T, Sato S, et al. Three signs to help detect Sjögren's syndrome: incidental findings on magnetic resonance imaging and computed tomography. *J Clin Med*. 2023;12:6487, <http://dx.doi.org/10.3390/jcm12206487>. PMID: 37892630; PMCID: PMC10607120.