Editorial

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The Role of Dentist in the Diagnosis of Primary Sjögren Syndrome

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The Primary Sjögren Syndrome (PSS) is a progressive and inflammatory autoimmune disease afflicting primarily exocrine glands, and it was first described by an ophthalmologist Henrik Sjögren in 1933. PSS is also called autoimmune epithelitis, it is an autoimmune alteration with characteristics present in a wide clinical spectrum that presents itself from a local exocrinopathy, involving lacrimal and salivary glands, and multiple systemic manifestations, therefore there is a high degree of underdiagnosis [1-3]. What would be the role of the dentist in the PSS diagnosis?

Epidemiologically, PSS has a prevalence of 0.1 to 0.5% of the population worldwide, affecting 2% of the adults in the USA, 2.7% in Sweden, and 3-4% in the UK. There is a higher incidence in individuals between the 4th and 5th decades of life, and it is more common in women than men (9:1). Initially, the main symptoms are xerostomia and xerophthalmia, often accompanied by systemic changes that could cause parenchymal effects, including lungs kidneys and livers. Additionally, it is associated with lymphoproliferative events, which could culminate in Lymphoma development. Thus, the decrease of the lachrymal and salivary secretion is caused by the destruction of the glandular parenchyma, mainly due to the chronic inflammation process [4-6].

The xerostomia is due to the decreased salivary flow production, it occurs when the total amount of the saliva produced is less or equal than 0.1 ml/min. Additionally, patients have a subjective sensation of dry mouth, these symptoms can be evaluated by dentists. The reduction in salivary flow could be considered as a biomarker of hypofunction of salivary glands, resulting in accumulation of dental plaque, development of caries development, periodontal diseases and opportunistic infections. Clinical signs include loss of brightness, dryness, pale and thin appearance of the oral mucosa, fissures and lobulations on the lingual dorsum, angular cheilitis and atrophy of the filiform papillae [7-9].

The differential diagnosis of PSS must be carried out with other diseases, which may cause xerostomia, such as previous radioactive treatment on the head and neck; hepatitis C infection, AIDS, lymphoma, sarcoidosis, hemochromatosis, graft versus host disease [1].

In 2002, the American European Consensus Group published the first International Consensus about PSS classification. Later, the American College of Rheumatology (ACR) agreed with Sjögren's International Collaborative Clinical Alliance Group, that PSS has three main alterations sicca keratoconjunctivitis, sialadenitis, and serological factors. Lately, ACR and European League Against Rheumatism published the new consensus patient with symptomatology suggestive of the disease can be diagnosed early basing objective criteria: positive serological examinations focal lymphocytic sialadenitis (focal score ≥ 1 foci/4 mm^2), ocular and oral objective criteria. This present classification showed sensibility of 96% and specificity of 95% comparing to previous ones [1, 10-12].

Based on the last classification for PSS diagnosis, the dentist has a very important role during this process and also for the treatment of these patients. It is a consensus to perform biopsy of labial salivary glands to diagnose and monitor disease progression because of the morbidity in lower compared to biopsy of major salivary glands. Besides that, the histopathology analysis is performed by an oral pathologist. The evaluation of the specimens should observe the presence of focal lymphocytic sialadenitis, characterized by an inflammatory focus (composed of an aggregate of 50 or more lymphocytes in 4 mm^2 of glandular tissue, in at least 4 lobes of the labial salivary gland) [1, 12].

Thus, the dentist plays an important role in the Primary Sjögren Syndrome diagnosis, including the biopsy and histopathological analysis of the labial salivary gland, corroborating with other health professionals for the patient's well-being.

References

1. Cavalcante W, Florezi GP, Bologna SB, et al. (2018) Síndrome de Sjögren primária : Aspectos relevantes para os dentistas. Clin Lab Res Den. 2017(1): pp. 1–11.

2. Fox RI (2005) Sjogren's syndrome. The Lancet. 366(9482): pp. 321-31.

3. Mavragani CP, Moutsopoulos HM (2010) The geoepidemiology of Sjögren's syndrome. Autoimmun Rev. 9(5): pp. A305-10.

4. Bell M, Askari A, Bookman A, et al. (1999) Sjögren's syndrome: A critical review of clinical management. J Rheumatol. 26(9): pp. 2051-2061.

5. Bowman SJ, Pillemer S, Jonsson R, et al. (2001) Revisiting Sjögren's syndrome in the new millennium: perspectives on assessment and outcome measures: report of a workshop held on 23 March 2000 at Oxford, UK. Rheumatology (Oxford). 40(10): pp. 11808.

6. García-Carrasco M, Ramos-Casals M, Rosas J, et al. (2002) Primary Sjögren syndrome: clinical and immunologic disease patterns in a cohort of 400 patients. Medicine (Baltimore). 81(4): pp. 270-280.

7. Proctor GB (2016) The physiology of salivary secretion. Periodontol 2000. 70(1): pp. 11-25.

8. Sreebny LM, Schwartz SS (1997) A reference guide to drugs and dry mouth: 2nd edition. Gerodontology. 14(1): pp. 33-47.

9. Bowman SJ (2010) Sjögren syndrome. Medicine (Abingdon). 38(2): pp. 105-108.

10. Shiboski SC, Shiboski CH, Criswell L, et al. (2012) American College of Rheumatology classification criteria for Sjögren's

syndrome: a data-driven, expert consensus approach in the Sjögren's International Collaborative Clinical Alliance cohort. Arthritis Care Res (Hoboken). 64(4): pp. 475-487.

11. Shiboski CH, Shiboski SC, Seror R, et al. (2017) 2016 American College of Rheumatology/European League against rheumatism classification criteria for primary Sjögren's syndrome: a consensus and data-driven methodology involving three international patient cohorts. Arthritis Rheumatol. 69(1): pp. 35-45.

12. Daniels TE, Cox D, Shiboski CH, et al. (2011) Associations between salivary gland histopathologic diagnoses and phenotypic features of Sjögren's syndrome among 1,726 registry participants. Arthritis Rheum. 63(7): pp. 2021-2030.