Scientific Research Publishing

Open Journal of Ophthalmology, 2023, 13, 263-266
https://www.scirp.org/journal/ojoph
ISSN Online: 2165-7416
ISSN Print: 2165-7408

Persistent Xerophthalmia in a Patient with Rheumatological Disease and Priiviary Sjogren's Syndrome: Case Report from Northern Brazil

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How to cite this paper: de Oliveira Brito, C.S., Alcantara, H.J.S.L., Limeira, J.d.J.O.L., da Silvat, J.S., Neto, S.B.F., de Melot, J.V.O., Tayah, Y.S., Tayah, D. and Alves, M.R. (2023) Persistent Xerophthalmia in a Patient with Rheumatological Disease and Priiviary Sjogren's Syndrome: Case Report from Northern Brazil. *Open Journal of Ophthalmology*, **13**, 263-266.
https://doi.org/10.4236/ojoph.2023.132024

Received: December 19, 2022
Accepted: May 28, 2023
Published: May 31, 2023

Abstract

This case study aims to contribute to the literature in order to highlight the importance of this collaboration between medical specialties. A female patient R.N.N. F, age 66, from the city of Manaus, with a previous diagnosis of Sjogren's syndrome in regular follow-up by the Rheumatology team at the Araujo Lima outpatient clinic and referred to the Ophthalmology sector for complementary evaluation related to visual discomfort. The fundoscopy performed in the patient was within normal limits, but the symptoms experienced by her proved to be an important clinical finding, which has ratified the need for regular and multidisciplinary follow-up. This report unequivocally demonstrates that even in the face of tests considered within the expected limits for a given population, the clinical presentation can be specific and particular for each analyzed individual. Early screening exams should contemplate the patient in a holistic and individualized way whenever possible.

Keywords

Sjogren's Syndrome, Ophthalmology, Rheumatology, Screening, Disease

1. Introduction

Dry eye disease is defined as a "multifactorial disease of the tears and ocular surface that results in symptoms of discomfort, visual disturbance, and tear film instability with potential damage to the ocular surface [1]. Dry eye is a common

disorder of the ocular surface that affects millions of people around the world. This term encompasses a series of symptoms and signs associated with impaired ocular lubrication, with varying severity. This dysfunction can cause mild discomfort to disabling pain and fluctuating vision, impairing the quality of life of individuals [2]. Recent studies have shown that dry eye is an inflammatory disease that has many features in common with autoimmune disease [3] [4].

Among the main causes of dry eye, we have Sjogren's syndrome (SS), an autoimmune chronic inflammatory disease that is characterized by a decrease in the function of the lacrimal and salivary glands, resulting in dry eyes and mouth. Other men infestations of this disease can affect multiple organs or systems and the severity of the disease can vary across a wide spectrum [5] [6] [7].

Primarily, SS occurs without association with other diseases, but it can occur in a way that complicates or overlaps with other rheumatic conditions, being more common than the association with systemic lupus erythematosus and rheumatoid arthritis. It is more common in women, between the fifth and sixth decade of life, but it can affect young people as well as men [8].

Early diagnosis and proper management of this disease can restrict the deleterious effects on the physical and psychological health of these individuals, in addition to reducing social costs related to this condition, which causes loss of productivity and the need for other specialized care [2]. Multidisciplinary work for the diagnosis and treatment of SS is crucial for controlling the natural course of the disease. This case study aims to contribute to the literature in order to highlight the importance of this collaboration between medical specialties.

2. Case Report

Female patient, aged 66, is from Manaus, State of Amazonas (Brazil). She works as a seamstress. She has a previous diagnosis of Sjogren's syndrome of possible primary etiology and reports a feeling of dry eye in both eyes and dry mouth. The patient was referred from rheumatology—where she follows the SS—to Ophthalmology for evaluation of the referred ophthalmological complaint by the same, having the result of the mapping of the retina returned as normal, according to the evaluation. Currently, the patient's drug prescription consists of: Levothyroxine 125 meg/day on an empty stomach; half tablet of Hydroxychloroquine 400 mg/day; Vitamin D 50,000 Iuinone pill per week for 8 weeks; Calcium + Vit D 400/500mg in 1 tablet per week and Alendronate 70 mg, 1 tablet once a week on an empty stomach. The patient's past pathological history points to hypothyroidism, and this post thyroidectomy, fibromyalgia, osteoporosis, and subacromial bursitis left subdeltoid.

During consultation, the patient complained of xerostomia, xerophthalmia and arthralgia in the left index finger and thumb. She has reported morning stiffness in the left hand for more than 30 minutes. Laboratory tests indicate serum levels of autoantibodies Anti-Ro/SSA positive.

After valuation and considering that since 2018 the patient complains of xe-

rophthalmia and the possible primary etiology of Sjogren's syndrome, eye drops have been prescribed for the patient, in addition to monitoring the rheumatological condition.

3. Discussion

SS is one of the most common autoimmune diseases, but it is underdiagnosed. Symptoms of dry eyes and mouth are systematically neglected complaints or poorly investigated by doctors. Valim *et al.* [9] was the first Brazilian study to provide epidemiological data on SS, using American-European criteria, having shown that the prevalence in Vitéria (ES) was 0.17%, but admits that this prevalence has been underestimated.

Because it is a syndrome with varied etiology and clinical presentation, it is difficult to precisely characterize its epidemiology. This is due to multiple factors, including the good response to the use of symptomatic drugs that can, in the short-term, mask the underlying disease, bringing momentary comfort to the patient.

The Brazilian Society of Ophthalmology (SBO), through the elaboration of guidelines and consensus, has been working to standardize and unify the criteria for diagnosis and treatment, which, therefore, will allow a more accurate understanding of the mechanisms of illness and their relation to environmental factors and other diseases as it is the case rheumatoid arthritis, ankylosing spondylitis and Sjogren's Syndrom.

However, even today it is a syndrome that is difficult to diagnose, with consensus and criteria to be established. And the lack of international consensus makes the path towards diagnosis a long process of evaluation and testing.

Institutions such as the Food and Drug Administration (FDA), the body that regulates medications in the United States and serves as a reference for other countries in Europe and Brazil, recommends the use of lubricants or artificial tears as a treatment for this disease. Artificial tears try to simulate the physicochemical characteristics of the lacrimal film (LF) such as osmotic pressure, surface tension, pH and viscosity.

Pharmacological formulations available on the market have worked at different levels of treatment, seeking prolonged hydration, increased viscosity, osmotic pressure and pH. These different treatment objectives explore different aspects of the same problem, providing greater comfort and ensuring a more individualized treatment.

Annually published randomized clinical trials focus on the approach to dry eye treatment on comparisons between artificial tears with different levels of viscosity, the use of artificial tears in contrast to other treatment modalities such as cyclosporine, systemic medications, among others.

Currently, the multidisciplinary approach and follow-up of SS has proven to be an effective means of providing patients with quality of life, Since there is systemic involvement that compromises other physiological functions (^!.) [10] [11].

4. Conclusions

Sjogren's syndrome is a systemic autoimmune disease, with a chronic course, white determines, in affected individuals, symptomatology, which requires multidisciplinary care, since it is varied, from the most common, such as xerophthalmia an xerostomia, to skin, lung and joint symptoms, and may also be associated with other diseases and the work of the team involved.

The treatment of SS is purely symptomatic, basically seeking relief from symptoms, as this disease has no cure.

Conflicts of Interest

Authors have declared that no competing interests exist.

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