

CASE REPORT ON SJOGREN'S SYNDROME

¹*Ganeswari Regati and ²Giri Raja Sekhar Dornadula

¹Pharm D Intern, Department of Pharmacy Guidance, Annamacharya College of Pharmacy, Rajampet, Kadapa, Andhra Pradesh, India.

²Assistant Professor, Department of Pharmacy Practise, Annamacharya College of Pharmacy, Rajampet, Kadapa, Andhra Pradesh, India.

Received on: 26/03/2021

Revised on: 16/04/2021

Accepted on: 06/05/2021

*Corresponding Author

Ganeswari Regati

Pharm D Intern, Department
of Pharmacy Guidance,
Annamacharya College of
Pharmacy, Rajampet, Kadapa,
Andhra Pradesh, India.

SUMMARY

Sjogren's syndrome is a persistent autoimmune disorder discriminates the symptoms of xerophthalmia, xerostomia, tiredness, arthralgia, and inflammation of major salivary glands. These symptoms of SS are due to excessive lymphocytic infiltration. Women with Sjogren's syndrome considerably greater than men; the gender dissimilarity tries between 9:1 to 19:1. SS is associated with genetic factors which may be triggered through some viruses and strain. SS can have effect on both central nervous system and peripheral nervous system. Pathophysiology of SS focus on part of epithelial tissue, cytokines, T-lymphocytes cell activating factor (BAFF) in the pathology and in addition autoantibody secreted by B lymphocytes. Treatment goals of SS consists of palliative control of signs and symptoms, preventing complications and immunosuppressive agents which consist of medications such as cyclophosphamide, methorexate, mycophenolate and azathiaprine which suppress the immune system. Potential healing interventions encompass BAFF inhibitors and anti-CD20 and anti-C22 therapy. Here we portray a case of 45 years old women with clinical manifestations of dry eyes, dry mouth, swelling of the lips and burning micturition. Specific antigen tests, ocular examination and other laboratory tests were performed. She was identified as Sjogren's syndrome and her signs and symptoms receded after treatment.

KEYWORDS: Sjogren's syndrome, an autoimmune disorder, keratoconjunctivitis sicca, xerostomia.

INTRODUCTION

Sjogren's syndrome (SS) is an immune deficiency exocrinopathy characterized via lymphocytic infiltration of lacrimal and salivary gland, which ultimately leads to xerophthalmia and xerostomia. Sjogren's syndrome predominately affect Middle-aged women,^[1] It may occur in two types. The primary form is characterized by xerophthalmia and hyposalivation and secondary form occur in conjunction with other autoimmune disease such as rheumatoid arthritis, polymyositis, systemic sclerosis, and hashimotos thyroiditis or lupus erythematosus.^[2] patients with Sjogren's whose disease is confined to the salivary glands, eye, head, and neck area might also increase co-existing circumstances like a parotid gland, corneal ulcer, blocked salivary ducts, and dental caries.^[3] Currently, SS is identified according to the European-American classification criteria. These criteria consist of optic symptoms, oral manifestations, objective evidence of dry eyes and salivary gland involvement, histopathological features, and auto antibodies. The classification requires six items, predominately four – in which the main has to be positive minor salivary gland biopsy or a positive antibody test.^[4] Treatment for Sjogren's syndrome depends at the organ affected. Many

people control keratoconjunctivitis sicca of Sjögren's syndrome by over-the-counter eye drops such as polyvinyl alcohol, polyethylene glycol Carboxymethylcellulose, methylcellulose, ciprofloxacin for eye lubrication and dry mouth sipping water more frequently, sugarless gum or citrus-flavoured hard candies, commercially available preparations of artificial saliva and oral lubricants such as salivert, Biotene mouthwash, mouhkote, xero-Lube, Saliment for saliva replacement can boost saliva flow.^[5] But some people need prescription medications or even surgical strategies.

CASE PRESENTATION

A patient of forty five-year-old female presented with chief complaints of burning micturition with itching and right leg joint ache in general medicine department at Government General Hospital, Kadapa. She had a past history of dry eyes, throat ache and recurrent oral ulceration which is associated with swelling of lips and dry mouth since six months as shown in figure:1:xerostomia.

Ocular examination was performed by Schirmer test where the spread of moisture was 4mm in both eyes,

which indicates severe dryness. Anti-Sjogren's syndrome-related anti-SSA/RO and anti-SSB/La were found to be positive and these conditions were diagnosed as Sjogren's syndrome. From the physical examination, red eyes were found as shown in the figure: 2.

Keratoconjunctivitis sicca.

Her laboratory investigations were Hb13.7g/dl, platelets:4.2lakhs/cells,WBC:8,900cells,neutrophils-60%, lymphocytes-35%,eosinophils-04%, monocytes-01%,creatinin 0.72mg/dl, rheumatoid factor , hepatitis C and HIV test were negative.



Figure 1: Initial view of affected person with xerostomia of SS.



Figure 2: An ocular examination of Sjögren's syndrome.

Outcome and follow up

She has been prescribed with T.methotrexate 7.5 mg once a week. Xerostomia can be tackled by drugs such as pilocarpine hydrochloride 5 mg taken 4 times day and chewable Vitamin C lozenges which improves salivary secretions. Xerophthalmia can be improved by eye lubricants such as methylcellulose which boost lacrimation. After using the medications for one week the patient's condition was improved and symptoms were subsided.

DISCUSSION: Sjogren's syndrome is an autoimmune disease characterized by infiltration of glandular tissue and next subsequent destruction of exocrine glands. Extra glandular dysfunction like chronic inflammation of the salivary and lacrimal manifested with oral and ocular dryness.(keratoconjunctivitis sicca, and xerostomia). It has various range of systemic medical evidences that affect any organ system⁶.Internal organs changes include peripheral neuritis, thyroiditis, interstitial lung disease, chronic atrophic gastritis, celiac disease,primary biliary cirrhosis and different liver manifestations,vasculitis, glomerulonephritis, hearing

issues, vaginal dryness, dyspareunia, and interstitial cystitis.^[7] Epithelial cells of the glands,cytokines,T lymphocytes, and B cell activating factor have all been demonstrated to contribute pathogenesis of this condition.^[8]

In this case patient is identified as type 1 i.e. primary Sjögren's syndrome and she experienced keratoconjunctivitis sicca and xerostomia due to extra glandular dysfunction. Positive ocular examination and positive anti-SSA and anti-SSB. The risk of developing Sjogren's syndrome in this patient due to age and genetic factor.

CONCLUSION

Sjogren's syndrome is a chronic, slowly progressive autoimmune disease occurs mostly female (especially in elderly women)than male. Early detection of clinical symptoms aids in offering the righteous care at the earliest and delay or misdiagnosis may lead to further complications like bronchiectasis, ophthalmological complication, and increased risk for non-Hodgkin

lymphoma. Symptomatic treatment is the mainstay to treat the disease and further monitoring is necessary to prevent other long-term complications. Early treatment can prevent overwhelming complications with SS.

ACKNOWLEDGMENT

I would like to sincerely thank Superintendent, Govt. General Hospital, Kadapa and HoD Department of General Medicine, Govt. General Hospital, Kadapa for their support.

Conflicts of interest: None.

REFERENCES

1. Tushar Phulambrikar, Priya Pande, Siddharth Singh, Shali Magar. Primary Sjögren's syndrome without ocular involvement: A rare case report. *Journal of Indian Academy of Oral Medicine & Radiology*, 2014; 26(1): 99-102.
2. Marcos de Mendonça Invernici, Amanda Finger Stadler, Gastão Vale Nicolau, Maria Ângela Naval Machado, Antônio Adilson Soares de Lima, and Marília Compagnoni Martins. Management of Sjogren's syndrome Patient: A Case Report of Prosthetic Rehabilitation with 6-Year Follow-Up. *Hindawi Publishing Corporation Case Reports in Dentistry*, 2014; 1-5.
3. American dental association (ADA). Oral Health Topics. Accessed 21/02/21 on www.ada.org.
4. Santosh Jadhav *et.al.*, Sjögren's Syndrome: A Case Study. *Journal of International Oral Health*, 2015; 7(3): 72-74.
5. Pesaramelli Karteek, Anishetty Ranjith, Sravani Kethireddy. Sjogren's syndrome: A Review of Clinical Features, Diagnosis, And Treatments Available. *International Journal of Pharmaceutical Sciences Review and Research*, 2001; 5(1): 93-99.
6. Bing Niu, Zhenzhen Zou, Yuqin Shen, Bingzhen Cao. A case report of Sjögren syndrome manifesting bilateral basal ganglia lesions. *Medicine*, 2017; 96(17): 1-4.
7. Bacem A.E.O. Khalele. Sjogren's syndrome in a 25-year-old female: A case study. *Future Dental Journal*, 2016; (2): 94-98.
8. Jisha J. Nair, Tejas P. Singh. Sjogren's syndrome: Review of the aetiology, Pathophysiology & Potential therapeutic interventions *journal Clin Exp Dent.*, 2017; 9(4): 39-47.