**Sjögren’s Syndrome: A Case Study**

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**Abstract:**

Sjögren syndrome is chronic, systemic autoimmune disease characterized by lymphocytic infiltration of the exocrine glands. It is an elaborate involvement of the lacrimal and salivary glands, which eventually lead to keratoconjunctivitis sicca and xerostomia. It may occur in two forms: Primary and secondary, which is associated with another autoimmune disease, usually rheumatoid arthritis. Numerous criteria were proposed for diagnosis of Sjögren syndrome. Most widely accepted are American and European group developed international classification criteria for Sjögren’s syndrome. These criteria include six different criteria:

- **Ocular symptoms** - (minimum one of the following points) - daily, persistent, troublesome dry eyes for not <3 months. Oral symptoms - (minimum one of the following symptoms) - Daily filling of dry mouth for not <3 months, recurrent salivary glands swelling, needs to drink water persistently.

**Case Report**

A 55-year-old female patient reported to the Bharati Vidyapeeth Deemed University Dental College and Hospital Pune, Department of Oral Medicine and Radiology on 28/8/11 complaining of:

1. Inability to eat completely due to loss of teeth.
2. Along with that patient also complained of dryness of mouth, since 1 year, and dryness of eyes since 7-8 years.

Extraoral examination showed bilateral parotid gland enlargement present on the right (Figure 1) and left side of the parotid region (Figure 2).

On an inspection - swelling on right and left of the parotid gland, measuring about 2.5 cm × 2 cm in diameter. Surface
texture over the swelling was normal. Swelling extending superior up to the inferior border of the mandible at the angle region. Ear lobe was everted on the right side.

On palpation it was diffuse, firm, non-movable, warm, tender on palpation, overlying surface texture was normal, along with that dryness of eyes, fever was also noted. Bilateral submandibular lymph nodes were palpable.

Intra-oral examination showed upper and lower well-formed edentulous alveolar ridges. Diffuse black pigmentation present on right and left buccal mucosa and palatal mucosa. Depapillation was present on the anterior 2/3rd and lateral border of the tongue (Figure 3). Buccal mucosa was thin and friable. After milking of the left side of the parotid gland pus discharge was coming through parotid duct (Figure 4).

Culture and sensitivity test showed organism isolated *Escherichia coli* grown. Complete hemogram showed increased erythrocyte sedimentation rate. Schirmer test and Rose Bengal dye test was positive. Serum immunoglobulin – SS-A RO positive for Sjögrens syndrome. RA factor was positive for rheumatoid arthritis. Ultrasonography shows bilateral submandibular and parotid gland enlargement with multiple hypoechoic lesions within showing very high vascularity, likely to present systemic disorder like Sjögren’s syndrome. Sialography shows diffuse foci of sialectasis (Figure 5). Incisional biopsy of lower lip was not done because the patient was not ready for the biopsy.

Figure 1: Right parotid gland enlargement.

Figure 2: Left parotid gland enlargement.

Figure 3: Depapillation on lateral border and anterior 2/3rd of tongue.

Figure 4: Pus discharge through the parotid duct.

Figure 5: Sialography showing diffuse foci of sialectasis.
Based on history, clinical presentation of the patient, and above investigatory findings, a confirmatory diagnosis of primary Sjögren syndrome was given.

**Discussion**

Sjögren's syndrome is defined as a clinical symptom complex. It is an autoimmune destruction of exocrine glands (primary salivary and lacrimal) that produces the clinical manifestations of dry mouth, dry eyes (keratoconjunctivities sicca), and in more than 50% of cases, parotid gland enlargement. Primary Sjögren syndrome is diagnosed when the syndrome is limited to this pattern of involvement. However, this pattern of involvement may be a manifestation of another well-defined autoimmune disease such as rheumatoid arthritis, systemic lupus erythematosus, or primary biliary cirrhosis. In this context, it is referred to as secondary Sjögren syndrome.6,7

Sjögren syndrome primarily affects women older than 40 years. However, newer diagnostic techniques such as parotid biopsies and antibody identifications have shown it in children and teenagers.8 The parotid enlargements are usually asymmetric and painless.

Complete physical examination of our patient at presentation and during the follow-up period of three months failed to reveal evidence of any associated connective tissue disease.

Treatment of Sjögren's syndrome depends on the extent and severity of the clinical manifestations and is better instituted through a multidisciplinary approach. Symptomatic treatment includes artificial tears, salivary substitutes to relieve the symptoms and prevent local infectious complications like conjunctivitis and corneal inflammation, development of caries and periodontal disease, a thorough dental preventive program should be implemented in all cases. Corticosteroid treatment should be reserved for all the cases showing evidence of organ damage, significant leukopenia or severe clinical symptoms.

Pathogenesis of Sjögren syndrome is complex and uncertain, but thought to be similar to that of the benign lymphoepithelial lesion. 6-10% of cases undergo transformation to lymphoma, because of infiltration of lymphocytic cell.9

The patient reported for the first and second visit shows value added scale (VAS). VAS scale-5 for burning sensation with hot and spicy foods. Pus collected from stensen's duct send for culture and sensitivity. Drainage of pus like the exudate after milking of the left parotid gland. Prescribed medicine was tablet doxycycline 100 mg – on first day BID, followed by OD for 5 days. Tablet paracetamol 500 mg BID for 1 week. Continuous sipping of water throughout the day, orbit VAS scale-4 for burning sensation of hot and spicy foods. After second week, drainage of pus like the exudate through left side Stensons duct after milking of the parotid gland. Tablet augmentin 625 mg – OD for 7 days. Tablet paracetamol 500 mg sos. Continues sipping of water throughout day, orbit chewing gums 3-4 times per day. Aquet spray (lubricating and moisten spray) – 3-4 times per day. Maintenance therapy was continued for next 3 weeks. Capsule menopause was also advised after consultation with a gynecologist from Bharati Hospital for about 1 month. This hormonal replacement therapy shows 10-20% reduction in xerostomia.

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