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Clinical features of secondary Sjögren's syndrome and endodontic-prosthetic approach

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Introduction

Sjögren's syndrome is an autoimmune process with an unknown etiology that has the symptoms of rheumatoid arthritis, keratoconjunctivitis sicca and xerostomia as a result of the destruction of lacrimal and salivary glands. It is clinically divided into two types. First one is called primary Sjögren's syndrome (SS-1) represented by xerostomia and keratoconjunctivitis sicca. Secondary Sjögren's syndrome (SS-2) is represented by systemic connective tissue disease in addition to dry eyes and mouth [1,2,3,4]. The most frequently associated diseases are rheumatoid arthritis, systemic lupus erythematosus and primary biliary cirrhosis. The peak age of onset is fifty decade of life and 90% of cases occur in women, usually in the perimenopausal or postmenopausal period [2,4]. Tear production are diminished or absent in patients with severe dry eyes. There are gritty or sandy feelings in and around the eyes. The cornea loses its luster and the light reflex may be distorted. The complain of blurred vision due to drying and disruption of the cornea may occur[2,4,5]. Xerostomia is the main oral complaint which leads to difficulties in eating, speaking, lubrication and taste sensation. The oral mucosa may be painful, burning or sensitive to spicy foods. There is greater risk for dental caries, periodantal disease and fungal infections, especially candidiasis in the mouth [1,2,4,6]. The other dry sites are the lips, nose, skin and vagina [4]. The treatment, should receive conservative therapy of tear replacement and intensive oral hygiene in the patients with significant eye and mouth dryness. If there are clinical or laboratory findings of systemic autoimmunity are diagnosed in these patients ([2,7]), additional therapies may be benefical in controlling the symptoms and progression of Sjögren's syndrome.

Objective

CASE REPORT

A twenty-third years old female referred complaining of dry mouth, chewing and swallowing difficulties, pain and burning in the mouth and caries in the teeth. In the history, the complaints such as anxiety, the loss of weight, sensetivity to light, pain and eudema in all joints (especially in hands and legs) has begun after mother's death. Oral complaints had been progresively increasing after that time. On extraoral examination, there was the exophthalmos, sensitivity to light, the visiual loss, the feeling of gritty in eyes, bilaterally swelling in the angulus of mandible, the dried and cracked lips and angulary cheilitis and no lymphadenopaty
(fig 1,2).
On intraoral examination, the oral mucosa was reddened, atrophic. The tonque was furroved, fissured and coated (fig 3). Caries, particularly involved the cervical and incisial surfaces, sensation and colored of all teeth was prominent. Periodontal problems such as plaque, hyperplasia and eudema in gingiva, tartars was present (Fig 4). Oral hygiene was poor. In the examination of salivary flow of stensen's duct, it was observed the insufficient flow rates and the increased viscosity of saliva.

The panoramic radiograph showed that the absence of opacity of enamel tissue in the upper and lower teeth and attrition of teeth were present. No periapical pathology was seen and the periodontal ligament was normal as well as maxillar and mandibular bony architecture (Fig 5). A sialograpy of the parotid glands, showed that the ducts were dilated but intact pattern and an absence of normal acinar morphology in glands (Fig 6).

To determine the diagnosis and make a treatment programme, some biochemical studies were made (table 1). Secondary Sjögren's syndrome was diagnosed clinical findings of xerostomia, keratoconjunctivitis sicca and rheumatoid arthritis after being diagnosed clinically were confirmed by radiographic and biochemical studies which was . The lower carious incisors were treated endodontically and then restored with screws and composite fillings after finnished the periodontal treatment
(fig 7,8). Full mouth fixed prosthetic treatment was the next step for the adjustment of occlusal level (Fig 9). Patient was given the topical artificial tears, oral flour tablets and instructious about oral hygiene and still visiting the clinic periodically for follow up.

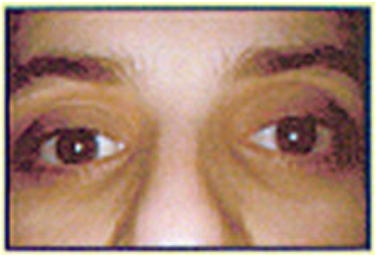

Fig 1:The apperance of dry eyes lead to keratoconjunctivitis

Fig 2:Bilaterally swelling of the parotid glands

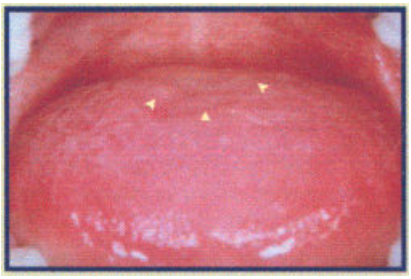

Fig 3:The apperance of the fissured tonque

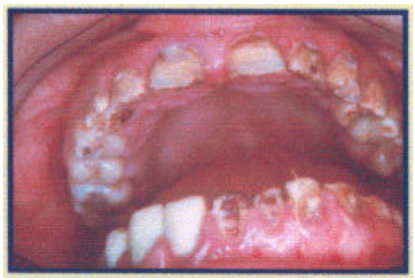

Fig 4:The apperance of teeth and gingiva

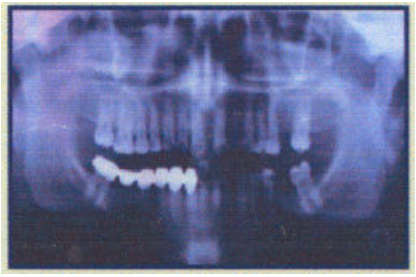

Fig 5: The panaromic apperance of teeth and jaws

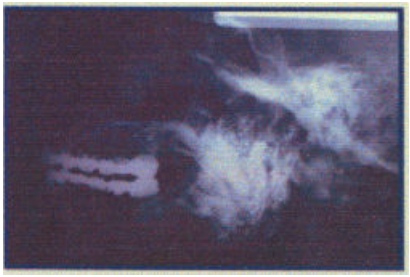

Fig 6: Sialograph of parotid gland

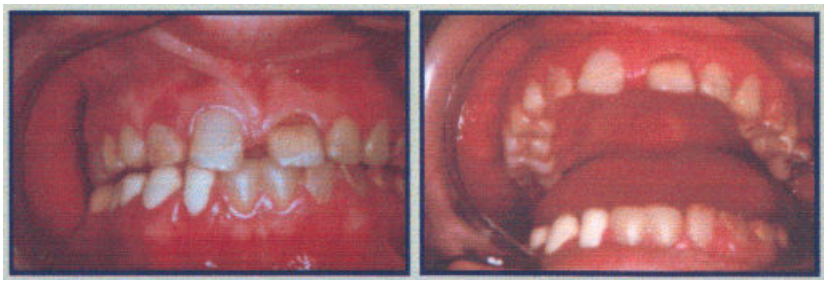

Fig 7,8: The apperance of teeth treated endodontically and composite filling

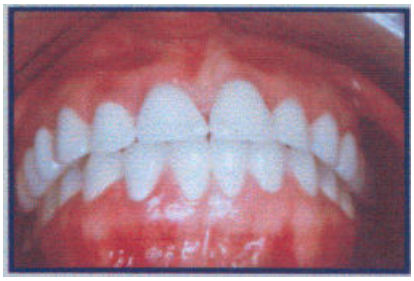

Fig 9: The fixed prosthetic restoration of teeth

Schiemer test	Rheumatoid factors	VDRL	Amilaz	Blood count
Reduced tear production	119,1 IU/ml	Negative	Normal	Normal

Discussion and Conclusions

Sjögren's syndrome is required a multidisciplinary treatment team. In this team dentist can play a larger role in the diagnosis and treatment of the patients which have many and severe dental problems. We belive that dentist can play a more active role in the early diagnosis and intervention affect the course of Sjögren's syndrome. It is also essential that physician should not said that the patient should learn to live their symptoms and that the effective and successful diagnosis and treatment should be considered in young patients.

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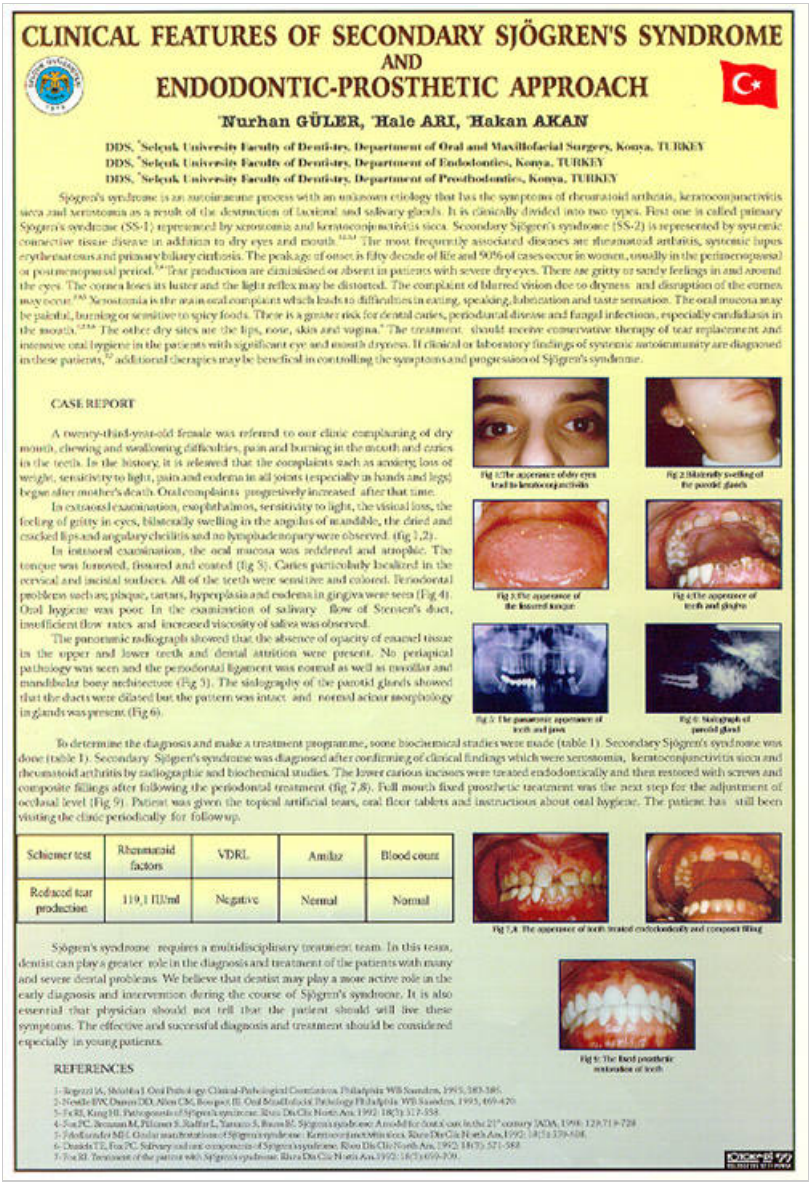

CLINICAL FEATURES OF SECONDARY SJÖGREN'S SYNDROME AND ENDODONTIC-PROSTHETIC APPROACH

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Sjögren's syndrome is an autoimmune process with an unknown etiology that has the symptoms of rheumatoid arthritis, keratoconjunctivitis sicca and xerostomia as a result of the destruction of lacrimal and salivary glands. It is clinically divided into two types. First one is called primary Sjögren's syndrome (SS-1) represented by xerostomia and keratoconjunctivitis sicca. Secondary Sjögren's syndrome (SS-2) is represented by systemic connective tissue disease in addition to dry eyes and mouth.[1,2,3] The most frequently associated diseases are rheumatoid arthritis, systemic lupus erythematosus and primary biliary cirrhosis. The peakage of onset is fifty decade of life and 90% of cases occur in women, usually in the perimenopausal or postmenopausal period.[3,4] Tear production are diminished or absent in patients with severe dry eyes. There are gritty or sandy feelings in and around the eyes. The cornea loses its luster and the light reflex may be distorted. The complaint of blurred vision due to dryness and disruption of the cornea may occur.[3,5] Xerostomia is the main oral complaint which leads to difficulties in eating, speaking, lubrication and taste sensation. The oral mucosa may be painful, burning or sensitive to spicy foods. There is a greater risk for dental caries, periodontal disease and fungal infections, especially candidiasis in the mouth.[1,2,6] The other dry sites are the lips, nose, skin and vagina.[7] The treatment should receive conservative therapy of tear replacement and intensive oral hygiene in the patients with significant eye and mouth dryness. If clinical or laboratory findings of systemic autoimmunity are diagnosed in these patients,[3] additional therapies may be beneficial in controlling the symptoms and progression of Sjögren's syndrome.

CASE REPORT

A twenty-third-year-old female was referred to our clinic complaining of dry mouth, chewing and swallowing difficulties, pain and burning in the mouth and caries in the teeth. In the history, it is released that the complaints such as anxiety, loss of weight, sensitivity to light, pain and oedema in all joints (especially in hands and legs) began after mother's death. Oral complaints progressively increased after that time.

In extraoral examination, exophthalmos, sensitivity to light, the visual loss, the feeling of gritty in eyes, bilateral swelling in the angulus of mandible, the dried and cracked lips and angularcheilitis and no lymphadenopary were observed. (fig 1,2).

In intraoral examination, the oral mucosa was reddened and atrophic. The tongue was furrowed, fissured and coated (fig 3). Caries particularly localized in the cervical and incisal surfaces. All of the teeth were sensitive and colored. Periodontal problems such as; plaque, tartars, hyperplasia and oedema in gingiva were seen (Fig 4). Oral hygiene was poor. In the examination of salivary flow of Stensen's duct, insufficient flow rates and increased viscosity of saliva was observed.

The panoramic radiograph showed that the absence of opacity of enamel tissue in the upper and lower teeth and dental attrition were present. No periapical pathology was seen and the periodontal ligament was normal as well as maxillar and mandibular bony architecture (Fig 5). The sialography of the parotid glands showed that the ducts were dilated but the pattern was intact and normal acinar morphology in glands was present. (Fig 6).

Fig 3: The panoramic appearance of teeth and jaws

Fig 6: Sialograph of parotid gland

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Fig 7,8: The appearance of teeth treated endodontically and composit filling

Sjögren's syndrome requires a multidisciplinary treatment team. In this team, dentist can play a greater role in the diagnosis and treatment of the patients with many and severe dental problems. We believe that dentist may play a more active role in the early diagnosis and intervention during the course of Sjögren's syndrome. It is also essential that physician should not tell that the patient should still live these symptoms. The effective and successful diagnosis and treatment should be considered especially in young patients.

Fig 9: The fixed prosthetic restoration of teeth

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