

Sjögren's Syndrome, Part II

Why is Early Diagnosis Important?

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Dry eyes can lead to shredding of the cornea, and eventual ulceration and scarring. Topical treatment remains most effective at this time. Artificial tears three to six times daily in a regular routine is important protection, and a gel preparation should be used at night. If the drops are irritating, preservative free preparations are required. It is important also to use a hot soak on the eyelids once or twice daily, followed by a gentle scrub of the eyelashes using baby shampoo. Plugging of the “*meibomian glands*” at the eyelid margins decreases the oil content of the tears, preventing them from coating the eyes properly. Glasses can be constructed to prevent evaporation of tears, and artificial plugs can be placed into the drainage ducts in the eyelids to make the tears remain in place over the eyes for a longer period of time.

Topical cyclosporine, an immune suppressant drug is marketed in the United States as *Restasis*®. It has been shown to be beneficial in some patients, but is not available in Canada. When ulceration or damage to the cornea is threatened, artificial tears can be made out of the patients own serum, and protective contact lens bandages can be applied.

Dry mouth is best managed with sugar free candy or gum. So-called “gustatory stimulation” is the best way to provoke saliva. A cherry pit or button in the mouth will do the same thing. At bedtime, a vitamin E capsule, broken over the fingers and swabbed on the inside of the mouth can give relief. The Biotene® products, including mouth creams, rinses and toothpastes can be soothing. Some people like the artificial salivary sprays at night, such as Salivert ® and Moi-Stir®.

Dental decay can be most problematic with this disease. Patients must see the dentist every three months for maintenance. Water bottles should be filled with tap water (fluoridated) rather than non-fluoridated commercial water. Fluoride rinses daily (Oral Balance® for example) or even fluoride trays supplied from the dentist can promote better protection. Many patients find that dental caps, when indicated, actually protect the teeth from further decay (not always the case), and amalgam fillings in the molars offer better strength against fragmentation than porcelain fillings. Implants may actually survive much better than initially expected, but time and more experience is required in this area.

Medication

Certain drugs impair salivary function, and should be used advisedly. These include muscle relaxants, such as cyclobenzaprine, mood altering drugs such as amitriptyline and nortriptyline, antidepressants, atropine and decongestants.

At this time no drugs have been proven to alter the course of Sjögren's Syndrome. Medication to modify the intensity of the autoimmune disease could be used in patients suffering with complications that affect vital organs or joints (see above). None of these drugs such as hydroxychloroquine, azathioprine and methotrexate have been shown to improve tear or saliva production, or shrink swollen parotid glands. Newer biologics such as rituximab are showing some promise in uncontrolled trials, but much more information is required.

Salagen® (pilocarpine tablets) and *Evxaxac*® (cevimeline tablets, USA only) stimulate the autonomic nerves that supply the salivary and lacrimal glands. Since these inflamed glands are often not destroyed, such medication can provoke residual function enough to increase tears and saliva. The major side effects include sweating, and aggravation of asthma or narrow angle glaucoma.

The Future

The scope of this article and the space available preclude a discussion on the research into Sjögren's Syndrome. An understanding of this and other autoimmune diseases has led to the creation of strategies to selectively dampen down an overactive immune system. Many such drugs have the potential for significant systemic side effects, and the challenge is to find a medication that would be safe enough to use in people with localized problems affecting mainly the salivary and lacrimal glands. Many of these drugs have been tried, and do not seem to improve glandular function. None-the-less, new agents are in development that might prove beneficial. This is a vigorous time in Canada for research into Systemic Autoimmune Diseases, such as Sjögren's Syndrome, and the future holds promise.