DENTAL CARE

Scleroderma is often associated with a number of potential health concerns including:

- Xerostomia-salivary hypofunction (dry mouth)
- Microstomia-diminished maximal oral aperture (limited mouth opening)
- Increased frequency of caries (cavities) and periodontal disease
- Fibrotic changes
- Fungal infections (Candida)
- Telangiectasia
- Bone resorption of the mandible (lower jaw)

The major and most common of these problems are xerostomia and microstomia. It is the presence of these that may contribute to the others listed.

Xerostomia

People suffering from xerostomia are more susceptible to periodontal disease, rampant caries, yeast and bacterial infections due to the loss of the protective functions of saliva. Dry mouth can also contribute to difficulty in speaking, eating and swallowing.

Special patient self-care and frequent professional oral hygiene therapy are key in minimizing these concerns.

Potential Strategies

1. Increasing Salivation
   a. Salivary stimulants
   b. Highly-flavored, sugar-free lozenges or gum.
   c. Saliva substitutes
   d. Rinsing the mouth with club soda
2. Decreasing the level of decay-causing bacteria on the teeth by brushing, flossing, effective tooth and gum cleaning.
3. Changing the cariogenecity (cavity-causing aspect) of the diet such as reducing sugar, sticky foods, etc.
4. Increasing resistance of the teeth to minimize demineralization (the first step in decay) with the use of fluorides.
5. Persons with xerostomia should drink approximately eight (8 oz.) glasses of water a day. Carrying a water bottle is a good idea. Increased water intake at meals is another good idea to help ease painful chewing and swallowing.

All degrees of xerostomia exist. Symptoms may range from dry mouth or burning sensation with normal mucosa to severe alteration in the mucous membranes. Clinically, the mucosa can appear dry, atrophic (shiny), inflamed, pale, and translucent. The tongue may appear dry, atrophic with loss of papillae (small ridges), inflamed, fissured, cracked, and in severe cases, denuded (outer layer removed).

Food & Substances to Avoid

The following foods and substances may have an irritating effect on dry oral mucosa:

Dry	Acidic
Bulky	Tobacco
Spicy	Alcohol

The following foods are better tolerated:

Gelatins	Potatoes
Yogurt	Melons
Sugarless candy and gum	

Eating

- Chew food slowly and thoroughly
- Increase intake of fluids to help with chewing, swallowing, and cleaning of food residue
- Teeth and mouth should be cleaned after every meal preferably by brushing, but by rinsing at the very minimum

Dentures

Potential problems may include:

a. Difficulty with retention due to dry mouth
b. Susceptibility to oral ulceration due to dry tissues and movement of dentures
c. Susceptibility to candidal/fungal infections (e.g. thrush mouth)
d. Angular stomatitis with red patches or ulcers at the corners of the mouth

Procedure which may help to alleviate denture problems are:

a. Frequent exams by dentist to maintain dentures and eliminate potential problems
b. Artificial saliva can lubricate the mucosal tissues and throat, assisting with denture retention
c. Meticulous denture cleaning
d. Dentures kept moist while out of the mouth
e. Removal of dentures at bedtime
f. Immediate treatment of sore spots, candidal infections, etc.

Microstomia (Small Mouth)

If the cheeks lose their elasticity and the facial tissues become indurated, the skin binds to the underlying connective tissue. This process is accompanied by a gradual reduction in the size of the mouth so that chewing and speech may become impaired.

Aside from an impairment of chewing and breaking down one's food in preparation for digestion, the restricted movements of the tongue and the development of microstomia often lead to a compromised ability to perform routine oral hygiene. This effort can be additionally hampered when accompanied by the decreased flexibilty of the hands due to scleroderma contractures.

Facial musculature stretching and exercising can help with microstomia. Dr. Patrick Naylor, D.D.S., PPH states, "Exercise is a valuable tool when properly applied, used regularly, and above all, monitored carefully by a health professional to assess its effectiveness. ***"Therabite"*** is a device to help with stretching exercises. See your dentist or physical therapist familiar with exercises for mouth and facial tissues.

Special Hygiene Devices and Techniques for Microstomia

- soft toothbrushes
- gentle, frequent brushing
- special brushing technique
- angled brushes
- easy-grip brushes
- specially adapted brushes with longer handles
- special interdental cleaning devices
- specific instruction from dentist or hygienist in hygiene (brushing, flossing, fluoride, etc.) techniques

It is important to try to preserve your own teeth as dentures are very problematic for persons with scleroderma. Preventive care at home and at the dental office is extremely important. Try to locate dentists familiar with scleroderma and its associated problems, treatment measures, exercises, preventive care, etc. Or, perhaps you can give this pamphlet to your dentist to help educate him/her in the special needs of a person coping with scleroderma.

Recommended Reading

"Understanding and Managing Scleroderma," published by the Scleroderma Foundation, Inc. This 36-page booklet presents in greater detail the latest and more inclusive information about scleroderma. It can be ordered from the Scleroderma Foundation or your local scleroderma organization.

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Your local chapter:

A member of the Scleroderma Foundation, an international non-profit organization servicing the needs of persons with scleroderma and related diseases.

Disclaimer: The information provided is for educational purposes only. Any drugs or treatments mentioned should be discussed with your own dentist or physician.

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