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Dental Medicine

What your dentist and rheumatologist want to know about scleroderma and oral health.

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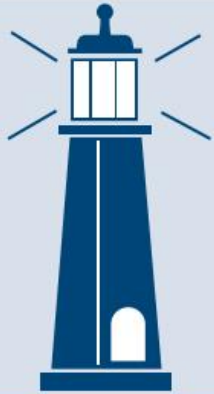
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What do your dentist and rheumatologist want to know?



The New England BEACON

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PATIENT EDUCATION SEMINAR 2014

What does your team want to know about you and scleroderma?

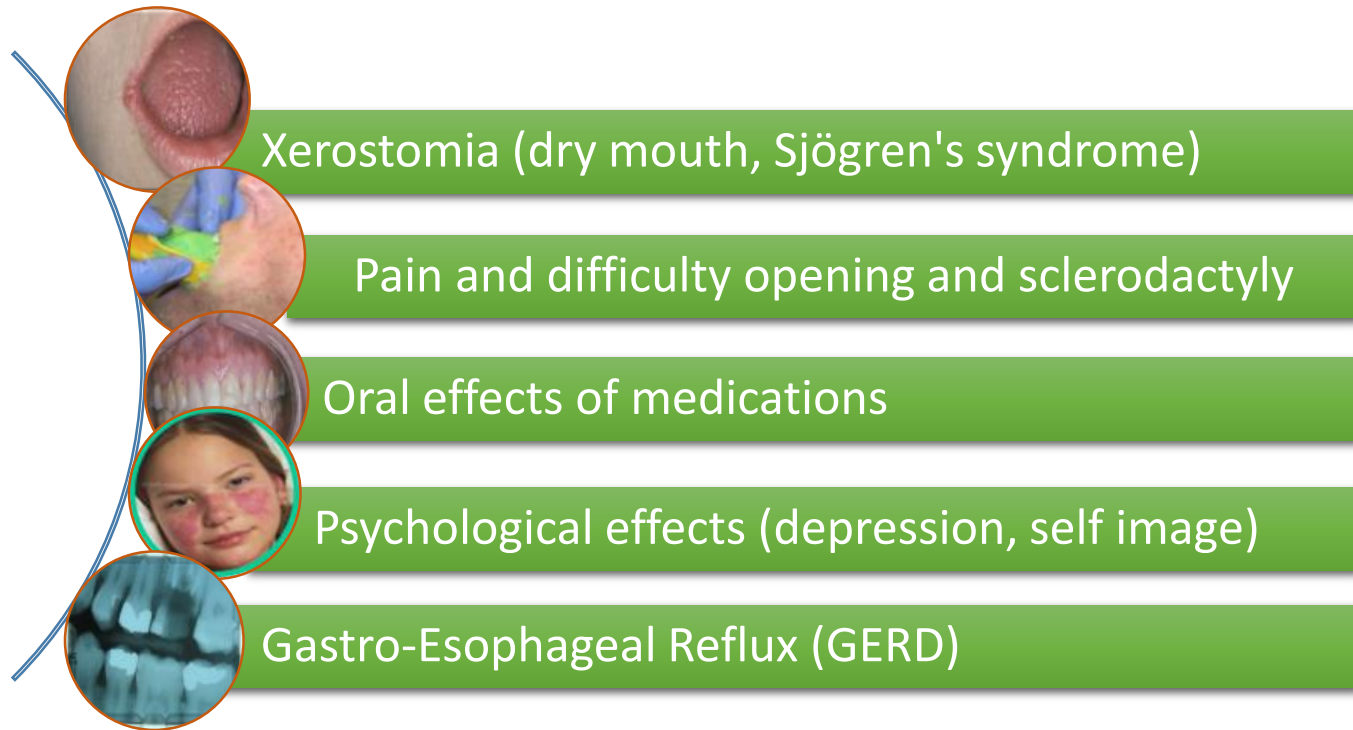
Medical team re: dental issues:

1. What are the oral health issues associated with Scleroderma?
2. How does a non-dentist recognized these problems?
3. What can medical healthcare professionals do to improve oral health for scleroderma patients?
4. How do I refer a scleroderma patient to a dentist and which dentist?
5. Write a letter to medical insurance to ask for coverage for medical coverage for dental care.
(Dr Tracy Frech, SF National, 2015)

Dental team re: scleroderma:

1. What are the oral health issues associated with scleroderma?
2. How does scleroderma affect your systemic health?
3. What medications do you take?
4. Who are your physicians?
5. How can oral health providers work with the medical team?
6. Dentists know dental insurance well, but not medical insurance.

Scleroderma and oral health



Dentists and Diagnosis of Scleroderma



Widening of the periodontal ligament in several teeth is pathognomonic for Scleroderma and may relate to disease severity.

(Bhaskar, SN. 1981. **Synopsis of Oral Pathology**. The CV Mosby Co. St. Louis, Mi.)

(Baron, Murray; et. Al. "the canadian systemic sclerosis oral health study V: Relationship between disease characteristics and oral radiologic findings in systemic sclerosis. *Arthritis Care and Research*. Accepted article, doi: 10.1002/acr.22739)

Anbiaee N, Tafakhori Z. Early diagnosis of progressive systemic sclerosis (scleroderma) from a panoramic view: report of three cases. *Dentomaxillofacial Radiology*. 2011;40(7):457-462. doi:10.1259/dmfr/64340754. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3528135/>

Scleroderma Increases Risk of Decay



High risk of tooth decay

Caries Management By Risk Assessment (CAMBRA)

Risk factors that apply to many scleroderma patients:

- Special health care needs
- 3 or more carious lesions (cavities) in last 3 years
- Teeth missing due to caries last 3 years
- Severe dry mouth
- Medications that reduce salivary flow
- Visible plaque
- Exposed root surfaces
- Lack of a dental home

Treatment of Xerostomia

- Symptomatic
- Caphosol: super saturated calcium phosphate rinse
- Calcium/phosphate paste
- Artificial saliva
 - Salivart, Oasis, Biotene rinse
- Sugar free candies
- Fluoride gel and rinse
- Medical – muscarinic agonist
 - Pilocarpine (Salagen) – 3 or 5 mg, TID
 - Cevimeline (Evoxac)

Caphosol

- 1 box contains 30 doses. 1 dose = 2 ampules mixed together.
- Available by Rx at pharmacies and at www.Caphesol.com (free delivery).



Home Care Products

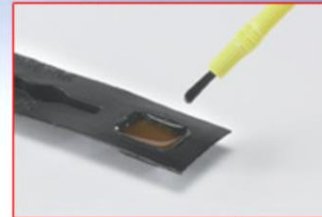
Calcium paste Fluoride Products



Fluoride Varnish



Great Tasting, Bubble Gum Flavor



Pre-measured wells assure consistent fluoride dosage with each application.

Medical and dental team members may apply fluoride varnish.

Why Can Muscarinic Agonists Be Used to Stimulate Saliva?

- The severity of salivary dysfunction is disproportionate to the amount of lymphocyte infiltration
- Most Sjögren's syndrome patients have remaining acinar cells in their salivary glands
- Muscarinic receptors on these cells are still capable of responding to stimulation
- In sufficient dosages, muscarinic agonists can increase secretion of exocrine glands

Safety Considerations

Contraindications:

- uncontrolled asthma
- hypersensitivity to the drug
- acute iritis
- narrow-angle (angle-closure) glaucoma



Safety Considerations

Cevimeline can potentially alter cardiac conduction, heart rate, and produce transient changes in hemodynamics.

Close medical supervision:

- history of cardiac disease
- controlled asthma
- chronic bronchitis
- chronic obstructive pulmonary disease
- beta adrenergic antagonists because of the possibility of conduction disturbances
- history of nephrolithiasis or cholelithiasis

Safety Considerations

Special Populations

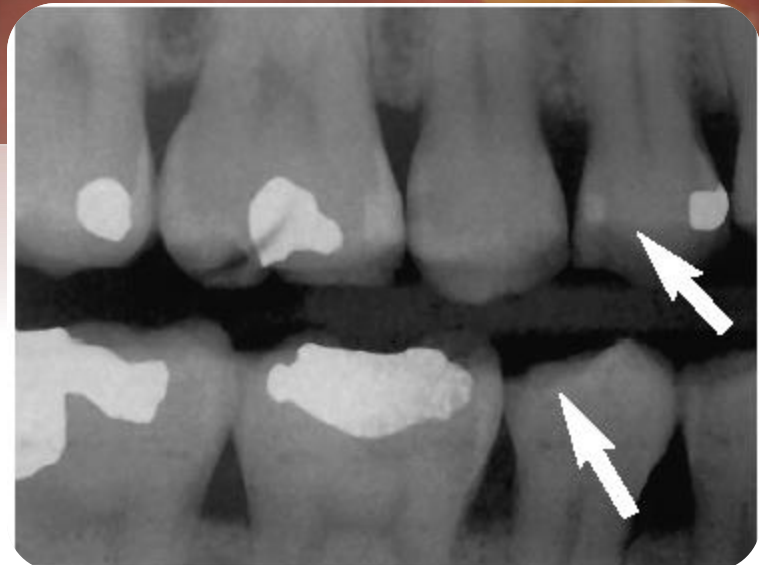
- Safety and effectiveness in pediatric patients have not been established
- Special care should be exercised when cevimeline is taken by geriatric patients, considering the greater frequency of decreased hepatic, renal, or cardiac function

Safety Considerations

Information for Patients

- By prescription only (dentist or medical team)
- If a patient sweats excessively while taking cevimeline, dehydration may develop
- Caution should be advised while driving at night or performing hazardous activities in reduced lighting

GERD



GERD

- Dental, medical, and patient work together
 - Treat aggressively
 - Raise the head of your bed 6" to 8" or use a wedge pillow
 - Medication
 - PPI (recommended), H2 antagonists, Antacids
 - Diet – consider consultation with a nutritionist
 - Low acid, no caffeine, nothing for 2 hours before bed
 - Endoscopy to Rule out Barrett's esophagus and ulcerations

Oral effects of Medications

Dentist & physician should work together

- Xerostomia.
- Gingival hyperplasia – swollen gums.
- Oral Lesions.
- Stomatitis.
- Candidiasis.
- Dysgeusia – taste change.
- Osteonecrosis (Bone death) of the Jaw.

Microstomia and Sclerodactyly

- Microstomia – small mouth
- Sclerodactyly – tightening of the fingers by scleroderma
- Medical team: Please refer to a physical therapist and an occupational therapist.
- Dental team: Alert the medical team when problems arise that interfere with activities of daily living including self care and eating.

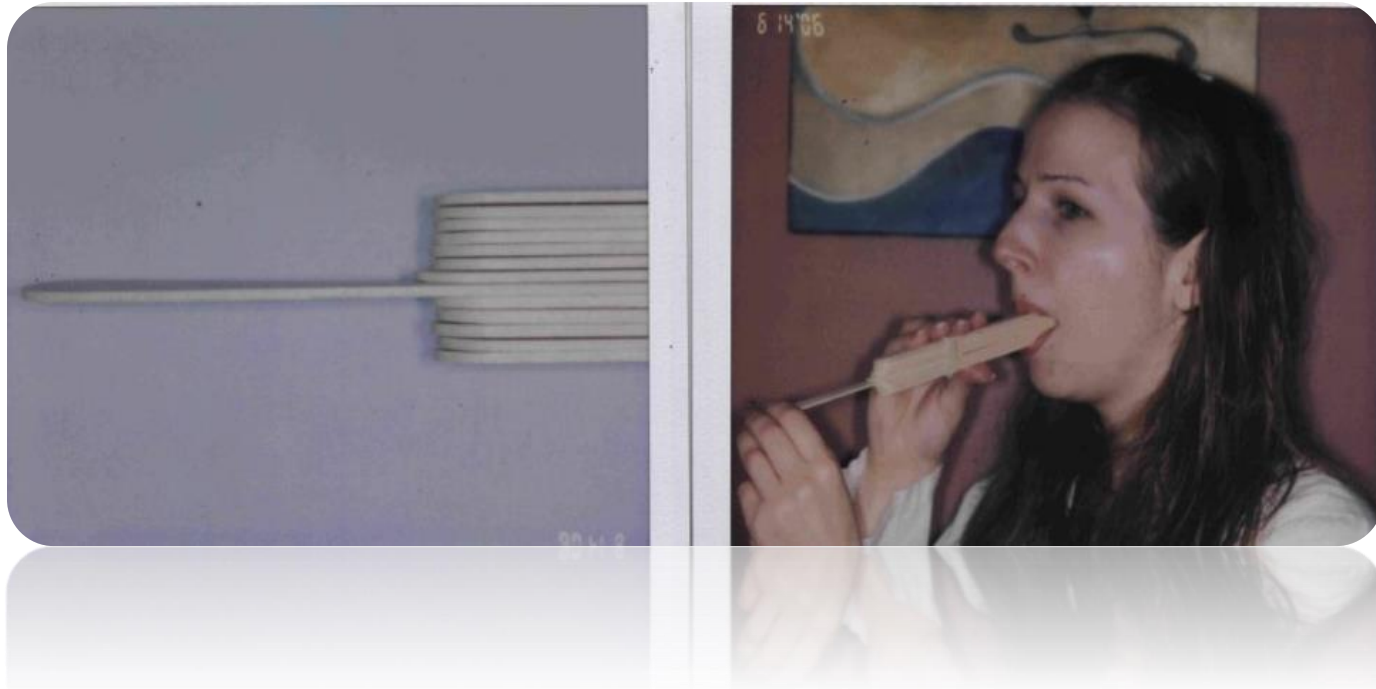
Microstomia

- Adjust the patient:
 - Physical therapy
 - Commissurotomy
- Adjust tools and technique:
 - Patience
 - Shorten burs or children's equipment
 - Floss with a floss aid
 - Impressions with smaller or cut down trays

Physical therapy



Physical therapy



Therabite and Orastretch



Require Rx, replacement parts, insurance.

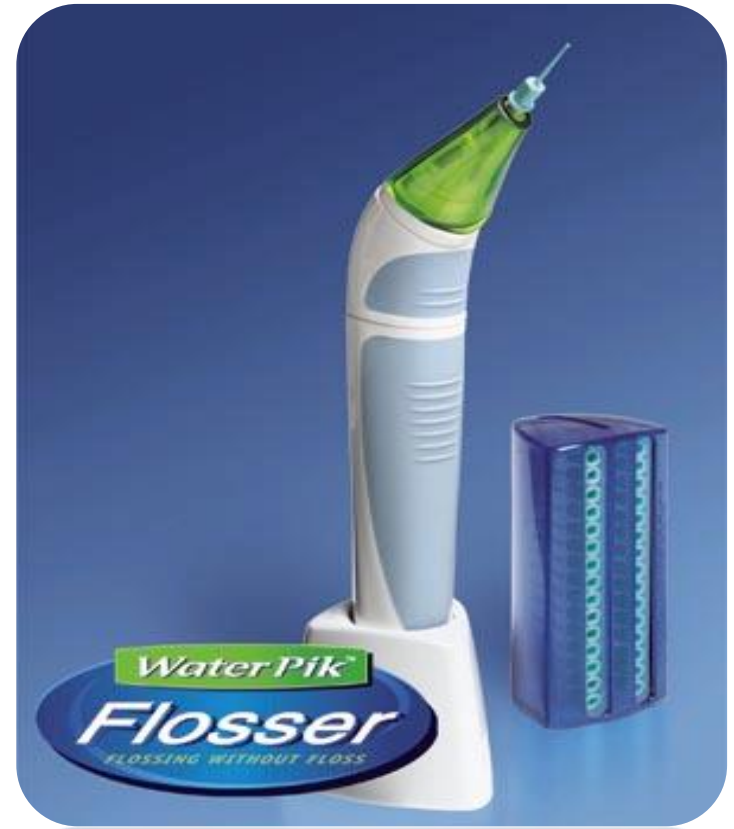
Adaptive Toothbrushes



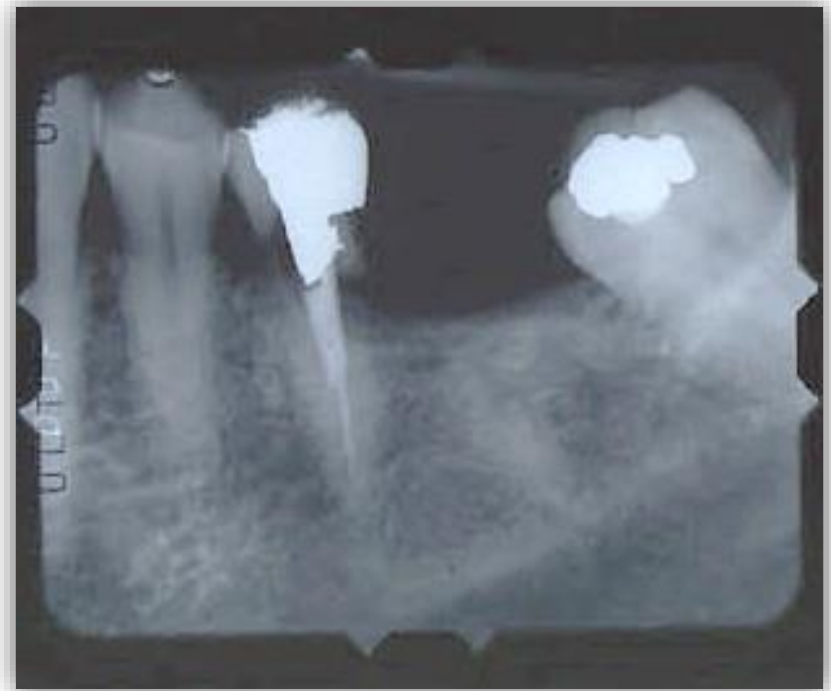
Power Toothbrushes



When flossing is a problem

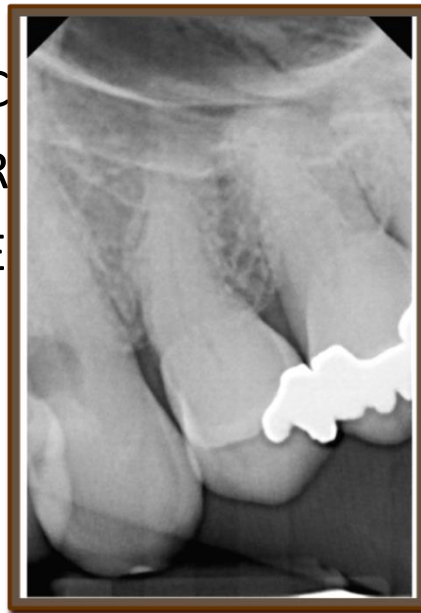


Multiple tooth resorption syndrome



56 year old male Caucasian

- C
- R
- E

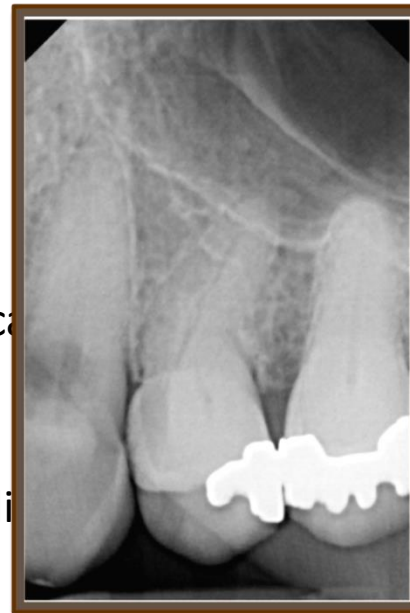


nt diagnosis

story

ng: No significant
several simple

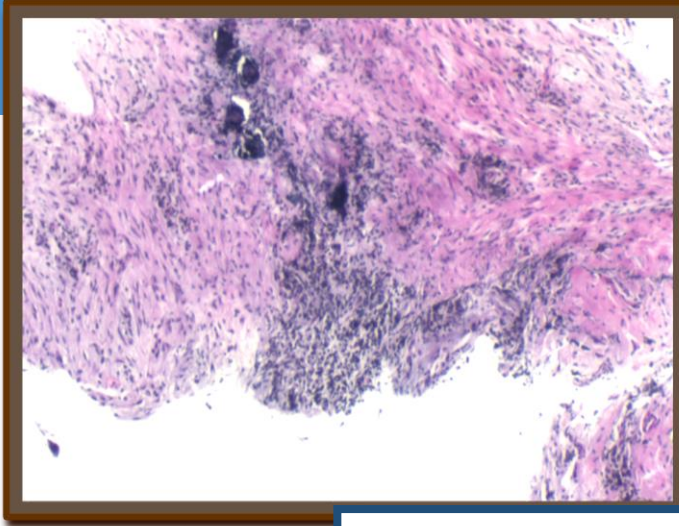
Mid-root radi



Restorative procedure

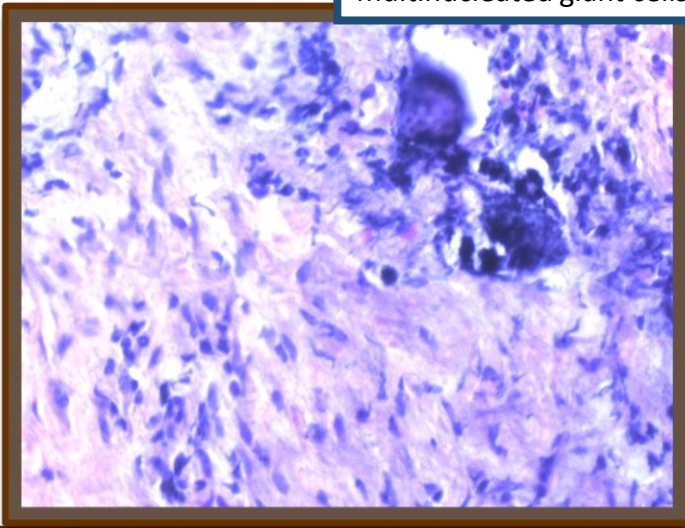
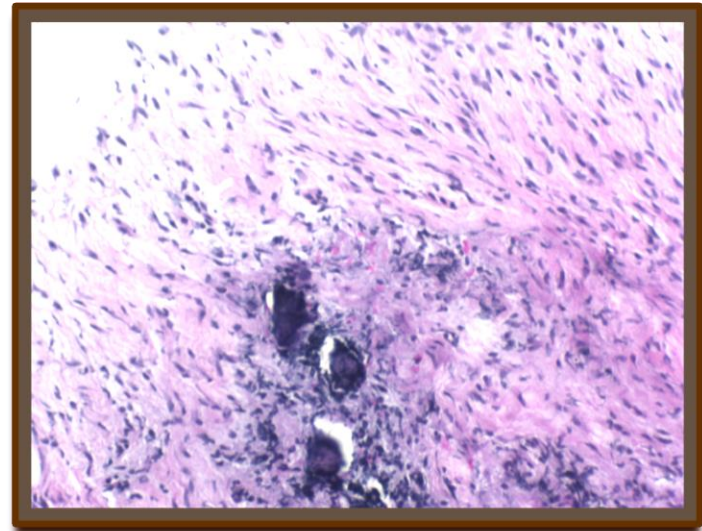


Biopsy



A- Low power magnification (4X), tissues displayed focally dense inflammatory infiltrate scattered in a loose connective tissue stroma.

B- Higher power magnification (10X) revealed the presence of fused phagocytic macrophages forming multinucleated giant cells.



C- These giant cells demonstrated typical features of cells known to resorb tooth surfaces and bone under highest magnification (40X).

Dental summary

- Tell the dentist you have scleroderma and how it affects you
- Annual x-ray imaging is important for prevention
- Bring your list of medications and physicians
- Short appointments
- Schedule for the best time of day for you
- Physical therapy right before
- Gloves and blanket (let the dental staff know if AC is a problem for you.)

Medical team and oral health

- Diagnose and treat xerostomia
- Diagnose and treat GERD aggressively
- Watch for side effects of medication that may affect oral health
- Prescribe physical and occupational therapy
- Refer patients to dentists.
- Provide medication lists and recommendations.

Scleroderma Oral Health Brochure

DENTAL CARE IN SCLERODERMA



People living with scleroderma face unique challenges while trying to maintain their oral health. They are more likely to be affected by dental conditions such as small mouth, dry mouth, jaw pain, gum disease, and dietary issues. Many people living with scleroderma have hand involvement, making it difficult to brush and floss. Please speak with your dentist about adaptive devices and tools that can help. More frequent check-ups are important for people who have scleroderma.

For more thorough information on Oral Health and Scleroderma, please visit www.scleroderma.org and search for Oral Health.

HOW CAN MY DENTIST, MY RHEUMATOLOGIST AND I WORK TOGETHER TO IMPROVE MY ORAL HEALTH?

Dentists know a lot about oral health, medications, and systemic health. However, just like primary care physicians, dentists do not know as much about scleroderma as your rheumatologist. Here are a list of scleroderma related oral health issues about which you may ask your dentist.

Microstomia (small mouth) and Tightness of the Mucosa (the lining of the mouth)

Problems:

- Hard for patients and professionals to clean teeth.
- The tight mucosa pulls the gingival (gums) away from the teeth.
- Hard or impossible to draw lips together to kiss.
- Limitation to tongue movement.

Treatments:

- Exercises and devices to improve the flexibility of the lips and jaw muscles.
- Periodontal (gum) surgery to improve mobility of the tongue and cheeks.

Xerostomia (dry mouth)

Problem:

- Uncomfortable
- Hard to swallow food
- Increased incidence of fungal infections
- Increased risk of tooth decay & gum disease
- Less taste sensation

Treatments:

- Thorough brushing and flossing
- Drink plenty of water
- Sugar free hard candies

OUR THREE-FOLD MISSION IS SUPPORT, EDUCATION AND RESEARCH

Support: To help patients and their families cope with scleroderma through mutual support programs, peer counseling, physician referrals, and educational information.

Education: To promote public awareness and education through patient and health professional seminars, literature, and publicity campaigns.

Research: To stimulate and support research to improve treatment and ultimately find the cause of and cure for scleroderma and related diseases.



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Scleroderma Foundation
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Questions ?

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