What your dentist wants to know about scleroderma.

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Department of Diagnosis And Health Promotion
Oral Medicine Clinic

Services include treatment of oral problems related to infectious and systemic disorders such as cancer, mouth lesions, dry mouth, AIDS/HIV, and taste disorders.

MDS: 4600 dentists, 80% of DMDs in MA

Council on Access, Prevention and Interprofessional Relations

National organization for people with scleroderma and their families and friends

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Survey of 350 scleroderma patients
(Phyllis, D., Leader, D., and Tao, W., 2011)

Scleroderma patients:

- Have difficulty finding a dentist who is prepared to treat them. (28%)
- Would not recommend their current dentist to other scleroderma patients. (63%)
A survey of dentists’ knowledge and attitudes with respect to the treatment of scleroderma patients

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Preceptor: Athena Papas, DMD, PhD
Rubenstein Oral Medicine Clinic
Tufts University School of Dental Medicine
### Attitude

If I were contacted by a patient who has scleroderma, I would

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Treat the patient.</td>
<td>120</td>
<td>45%</td>
</tr>
<tr>
<td>2</td>
<td>Refuse to treat the patient.</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>Gather more information on scleroderma or on the patient's</td>
<td>133</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>condition.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Refer the patient.</td>
<td>7</td>
<td>3%</td>
</tr>
<tr>
<td>5</td>
<td>I don't know what I would do.</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>265</td>
<td>100%</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>I feel prepared to treat scleroderma patients.</th>
<th>Knowledge score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
</tr>
<tr>
<td>%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
</tr>
<tr>
<td>%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Mann Whitney U test $p = 0.04$
If you would like to learn more about scleroderma, how would you prefer to learn about it?

258 of 269 (95.9%) respondents chose at least one.
What is Rheumatic Disease?

• A group of disorders that share certain signs, symptoms and medications.
• Inflammation: Redness, Heat, Swelling and Pain
• Loss of function:
  • Loss of range of motion.
  • Decrease in air exchange or kidney function.
  • Decrease in exocrine gland function.
• Rheumatoid Factor
• Rheumatism is an equivalent and older term.
Over 100 conditions

- Erosive Inflammatory Arthropathies
  - Rheumatoid Arthritis

- Collagen Vascular Diseases
  - Systemic Lupus Erythematosus
  - Sjögren’s Syndrome
  - Systemic Sclerosis (Scleroderma)

- Vasculitides
  - Giant Cell Arteritis or Temporal Arteritis

- Infections
  - Lyme Disease
Hallmark sign: skin becomes thick, less pliable
- Limits embrasure and opening
- Sclerodactyly
Effects on internal organs
- Raynaud’s syndrome
Treated with many medications used for other rheumatic diseases
Scleroderma and oral health

- Xerostomia (dry mouth, Sjögren's syndrome).
- Pain and difficulty opening.
- Oral effects of medications.
- Psychological effects (depression, self image).
- Gastro-Esophageal Reflux (GERD)
Scleroderma Increases Patients' Decay Rate

Many interrelated Ways

- Diet
- Self Cleaning
- GERD
- Xerostomia
- Oral Hygiene
- Depression
- Access to care
- Host Resistance
Oral Effects of Medications

- Xerostomia.
- Oral Lesions.
- Stomatitis.
- Candidiasis.
- Intraoral hemorrhage
- Dysgeusia – taste change.
- Gingival hyperplasia – swollen gums.
- Osteonecrosis (Bone death) of the Jaw.
Multiple tooth resorption syndrome
Caries Management By Risk Assessment

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.
- Calcium/phosphate preparations
  - Paste or rinse
- Artificial saliva.
  - Salivart
- Sugar free candies.
- Fluoride gel and rinse
- Medical
  - Pilocarpine (Salagen)
  - Cevimeline (Evoxac)
Fluoride Varnish

Great Tasting, Bubble Gum Flavor

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

Cavity Shield

Duraphat

5% Sodium Fluoride Varnish

Professional Chairside Kit

Colgate

Tufts UNIVERSITY
GERD
GERD

- Work with MD and Patient
  - Medication
    - PPI, H2 antagonists, Antacids
  - Diet
    - Low acid, no caffeine, nothing for 2 hours before bed
- Endoscopy to Rule out Barrett's esophagus and ulcerations.
Adjust tools and technique:

- Patience
- Shorten burs.
- Floss with a floss aid.
- Impressions with smaller or cut down trays.
- Mouth prop
- Rubber dam
- Patience of both parties
- Short appointments and/or breaks
- Adjust patient:
  - Physical therapy.
  - Commissurotomy.
Adaptive Toothbrushes
Power Toothbrushes
When flossing is a problem.
Physical Therapy
Therabite and Orastretch

Require Rx, replacement parts, insurance.
Questions?

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Brochure:
Dental Care in Scleroderma, Scleroderma Foundation