GUM DISEASE

- Difficulties eating
- Lose nice smile
- Bad odor
- Becomes difficult to receive dental treatment
- Inability to report pain

DENTAL DISEASE AND ALZHEIMER’S
GUM DISEASE AND ALZHEIMER'S

JANUARY 28, 2019 – A recent study has uncovered a potential link between gum disease and Alzheimer’s disease. Researchers analyzed brain tissue, spinal fluid, and saliva from Alzheimer’s patients—both living and deceased—and found evidence of the bacteria P. gingivalis. Gingipains, the toxic enzyme secreted by P. gingivalis, were found in 96 percent of the 53 brain tissue samples examined, with higher levels detected in those with the pathology and symptoms of Alzheimer’s disease. This study provides initial data that demonstrate elevated antibodies to periodontal disease bacteria…

Serum antibodies to periodontal pathogens are a risk factor for Alzheimer’s disease

This study provides initial data that demonstrate elevated antibodies to periodontal disease bacteria…

In subjects years prior cognitive impairment and suggests…

…periodontal disease could potentially contribute to the risk of AD onset/progression.

Dental Care Through The Stages

Early, Middle, Late
PREVENTION
- Dental disease is nearly 100% preventable.
- Dentistry is necessary when prevention fails.

EARLY STAGES
- Focus on prevention
- Get check-ups and cleanings
- Have necessary dental work completed
- GOAL: Control bacteria by brushing and cleaning between the teeth. Implement Xylitol toothpaste/gum

TOOTHBRUSHING and INTERDENTAL CLEANING
- Person is usually able to perform their own oral care
Dental care in early dementia might prevent problems later

- “Early in the disease, we should build positive habits so patients don’t forget what their dentists advise.” Robert Emanuel

THE RIGHT DENTAL TEAM

- Find the right dental team.
- Contact your local dental society to find the names of professionals who have experience working with people with dementia or with elderly patients.
- Call local dental offices to inquire about their ability to work with people with Alzheimer’s.

MIDDLE STAGES

- Focus on coaching. Person may be resistant to assistance.
- Oral care can be more challenging.
- Person may forget what to do with toothpaste, rinsing, etc.
- GOAL: Control bacteria by brushing and cleaning between the teeth. Implement Xylitol Mints.
**TOOTHBRUSHING**

- Person may forget how to brush his or her teeth or forget why it's important.
- As a caregiver, you may have to assist or take a more hands-on approach.

**PROVIDE INSTRUCTION**

- Provide short, simple instructions.
- Break directions into steps, not just “Brush your teeth.”
- Walk person through the process.
  - “Hold your toothbrush.”
  - “Put paste on the brush.”
  - “Brush your teeth.”

**WATCH ME or HAND OVER HAND**

- Use a “watch me” technique.
  - Hold a toothbrush and show the person how to brush his or her teeth.
- Use a “hand over hand” technique.
  - Put your hand over the person's hand, gently guide the brush.
  - If the person seems agitated or uncooperative, postpone brushing until later.
“Deep Clean” Toothbrush

INTERDENTAL CLEANING

- Cleaning between the teeth is recommended daily.
- If using floss is distressing, try using a "proxabrush" to clean between teeth instead.

INTERDENTAL BRUSHES
BACTERIA MAY NOT BE CONTROLLED WELL

- Brushing technique may not be adequate.
- Interdental cleaning may be non-existent.
- If the person seems agitated or uncooperative, postpone brushing until later.
- Utilize xylitol mints to assist with bacterial control.

XYLITOL

- Found in plants, fruits and vegetables.
- Created every day in our bodies.
- Discovered in 1891.

- Bacteria cannot digest it.
- They die, leaving room for friendlier bacteria.
- Bacterial balance.
- Stimulates saliva flow.
- More saliva means more tooth protection.
Be aware of potential mouth pain. Investigate any signs of mouth discomfort during mealtime. Refusing to eat or strained facial expressions while eating may indicate mouth pain or dentures that don’t fit properly.
DENTAL VISITS

- Keep up with regular dental visits for as long as possible.
- This will help prevent tooth decay, gum problems, pain and infection.

- Provide the dentist with a list of all health care providers who are caring for the person with dementia.
- Provide a list of all medications.
- Certain medications can contribute to dry mouth and other oral health issues.

DRY MOUTH (XEROSTOMIA)

- Causes
  - Medications
  - Radiation
- Outcomes
  - Inability to chew
  - High rate of decay

PHARMACOLOGIC AGENTS THAT MAY CAUSE OR EXACERBATE XEROSTOMIA
- Antihistamines
- Antidepressants
- Antipsychotics
- Opioids
- Decongestants
- Cardiovascular agents
- Corticosteroids
- Antiepileptic agents
- Antiemetics
- Antihyperlipidemics
- Antihypertensives
- Antispasmodics
- Antitussives
- Antivirals
- Bronchodilators
- Diuretics
- Glucocorticoids
- Hypoglycemics
- Neuroleptics
- Nitrates
- Ophthalmics
- Opioids
- OTC cough/cold medications
- OTC decongestants
- OTC pain medications
- OTC sleepers
- PDE5 inhibitors
- Proton pump inhibitors
- Antifungals
- Chemotherapeutics
- Other

AlzPossible Together
Making it Possible Together
Focus on providing oral care. Person may be resistant.

Oral care can be more challenging

Important to have an educated provider

**GOAL:** Control bacteria by brushing and cleaning between the teeth as tolerated. Implement Xylitol Gel

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**TOOTHBRUSHING**

- Allow plenty of time and find a comfortable position if you must do the brushing yourself.
- Wet the brush.
- No need for toothpaste.
- Brush the person’s teeth and gums by placing the toothbrush at a 45 degree angle to the gums, so you massage the gum tissue as you brush the teeth.
- Brush the tongue and roof of the mouth.
- Brush at least twice a day, with the last brushing after the evening meal or before bed.

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**TOOTHBRUSHES**

- Try different types of toothbrushes.
- A soft bristled children’s toothbrush may work better than a hard bristled adult’s brush.
- A long handled or angled brush is easier to use than a standard toothbrush.
- Experiment until you find the best choice.
- Electric dental appliances may confuse a person with Alzheimer’s.
INTERDENTAL CLEANING

- Interdental cleaners may be the best approach.
- Can be difficult to get floss into the mouth.
- Person may try to bite.
- Keep fingers out of mouth.

DENTURES

- Rinse dentures with plain water after meals.
- Brush them daily to remove food particles.
- Remove at night and soak in a cleanser or mouthwash.
- Use a soft toothbrush or moistened gauze pad to clean the gums, tongue and other soft mouth tissues.

ROBERT EMANUEL, DDS
Special Care Dentist

- "With dementia patients, we tend to be treatment-oriented and there’s not as much talk of prevention." Robert Emanuel
Dementia is associated with a change in health habits, including two major ones – diet and teeth cleaning.

When patients go to residential care, they tend to have a more sugary diet and have problems cleaning their teeth.

If not looked after properly, their teeth can deteriorate quite quickly.

Sometimes their teeth are nearly untreatable.

**DENTAL VISITS**

- Mostly non-existent.
- Transportation to a dental office is a challenge.
- Difficult for person to accept dental treatment.
- Dental office personnel not trained in working with late stage Alzheimer's.

**IMPORTANT:** Trained dental professional comes to the person with Alzheimer's.

**Assisted Living Community Screening**

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<thead>
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<th>Category</th>
<th>Healthy</th>
<th>Changes</th>
<th>Unhealthy</th>
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<tbody>
<tr>
<td>Hair</td>
<td>67%</td>
<td>33%</td>
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<tr>
<td>Tongue</td>
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<tr>
<td>Gums and Tissues</td>
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<td>Saliva</td>
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<tr>
<td>Dental Pain</td>
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<td>18%</td>
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Assisted Living Community Screening

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<tr>
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<tr>
<td>Gums and Tissues</td>
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</tr>
<tr>
<td>Dental Pain</td>
<td>82%</td>
<td>18%</td>
<td>0%</td>
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</tbody>
</table>

Most Dependent Elders Unable to Perform Adequate Basic Oral Care Tasks

- May lack manual dexterity
- May lack cognitive ability

Nursing Assistants Unable to Control Bacteria Effectively
A DENTAL HYGIENIST

- Associates, Bachelors or Masters Degrees
- Over 3,000 hours of education for Associate Degree
- Dental disease prevention experts

OFFERING MANY IN HOUSE SERVICES

- Oral Care Services
- Xylitol
- Toothbrushes
- Toothpaste

A MISSING COMPONENT...

- Brushing
- Between the teeth cleaning
- Dental health products
  - Xylitol
  - Toothbrushes
  - Toothpaste
TOOTH BRUSHING

- Research has shown tooth brushing...may prevent death from pneumonia, especially aspiration pneumonia. Oral hygiene reduces the chronic inflammation that periodontal (gum) disease causes, which increases the risk of coronary heart disease and stroke. *Journal of the American Geriatrics Society.*

- Approximately one in 10 cases of death from pneumonia in elderly residents may be prevented by improving oral hygiene. *Journal of the American Geriatrics Society.*

PROFESSIONAL ORAL CARE

- Weekly professional mechanical cleaning of the oral cavity, rather than a daily chemical disinfection of the mouth, can be an important strategy to prevent aspiration pneumonia in the dependent elderly.

- Results showed that oral hygiene condition could be improved by performing professional oral care at intervals of 1 week for 12 consecutive weeks, and the improved condition could be maintained when professional oral care was continued at intervals of 1 week thereafter.

A SOLUTION

[Image of Scott Walker in session]
DENTAL HYGIENE SERVICES AND TELEDENTISTRY

- DENTAL CLEANING
- FLUORIDE TREATMENTS
- INTRAORAL IMAGES
- EVALUATION OF IMAGES BY A DENTIST

PREVENTION

- Dental disease is nearly 100% preventable.
- Dentistry is necessary when prevention fails.
Thank You

Angie Stone, RDH, BS
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HyLife Oral Health Alliance

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