DENTAL CARE FOR ALS PATIENTS

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My Braces Clinic
Good Dental Health
Improve Quality of Life

- Comfort/Well Being/ Eating/ Reduce risk of systemic infection

- Oral care may often be neglected because of other duties & patients can have difficulty expressing their desire for more attention in this area

- As a caregiver, you can be in-tune with the need and desire for oral care through awareness
Dental Disease Approach

- Prevention of dental disease for patient comfort
- Identify disease to relief pain
- Oral conditions may arise due to the effects of medication. Sialorrhea (excessive drooling) may developed due to ineffective clearance of saliva, thickened mucus and/or xerostomia (dry mouth) that arises from mouth breathing
Outline

- Challenges that ALS patients face
- How to identify and manage common dental diseases
- Tooth Cleaning tools available for the ALS patient
- Salivary Control
- Approach to dental treatment with the dentist
- List of Government dental clinics in hospital and their contact numbers
- Proper Oral Hygiene Habits (Show and Tell)
Challenges

Physical changes that may occur with ALS might make it difficult to keep the mouth clean. These include:

- Changes in the hand/arm function may make it difficult to:
  - Hold a toothbrush and brush with it
  - Hold floss and move it between teeth
  - Put dentures in and/or take them out

- Changes in the function of the mouth, lips, cheeks, and tongue may make it difficult to:
  - Clear food stuck in the mouth after swallowing a bite
  - Spit after brushing
  - Swish or hold water/mouthwash in the mouth
Challenges

- Changes in the function of the swallowing muscles may make it difficult to clear mouth of saliva
- Dry mouth due to mouth breathing, BIPAP use, and/or certain medications
- Changes in the mobility may make it difficult to
  - Receive dental care in a traditional dental clinic exam chair
  - Perform daily oral care while sitting upright
Identify Common Dental Diseases

- Gum Disease
- Caries
- Dental Abscess
- Cellulitis
- Mouth Sores
Identify Gum Disease

- Gum disease is an inflammation of the gums and the tooth sockets (alveolar bone).

- Due to plaque deposits. Plaque is a sticky material made of bacteria, mucus, and food debris that develops on the exposed parts of the teeth. It is also a major cause of tooth decay.

- If you do not remove plaque, it turns into a hard deposit called tartar. The bacteria and the toxins they produce cause the gums to become infected, swollen and tender.
Signs of Gum Disease

- Bleeding gums (blood on toothbrush even with gentle brushing of the teeth)
- Bright red or red-purple appearance to gums
- Gums that are tender when touched, but otherwise painless
Signs of Gum Disease

- Mouth sores
- Swollen gums
- Shiny appearance to gums
- Tartar/ Calculus
- Receeding gums causing the teeth to look longer
- Loose/Separating teeth
Tooth Decay

- Cavities are holes in the teeth

- Bacteria are normally present in the mouth. This bacteria convert all foods -- especially sugar and starch -- into acids which dissolve the enamel and create holes in the tooth (cavities).
Tooth Decay

- Cavities are usually painless until they grow very large and affect the dental nerves or cause tooth fracture.
- Untreated cavities may result in a tooth abscess/cellulitis/sore.
- When this happens, the tooth has to be root canal treated or extracted.
Abscess/Cellulitis/Sores
Normal Lumps in Mouth

Do not mistaken it as abscess/sores/abnormal growth!
If in doubt, consult a dentist.

Torus Palatinus
(hard bony protrusion on palate)

Torus Mandibularis
(hard bony protrusion on tongue surface)
Signs/Symptoms of Tooth Decay

**Signs**
- Visible pits or holes in the teeth
- Most cavities are discovered only during routine check up

**Symptoms**
- Nil
- Toothache/Sensitive teeth (hot/cold/sweet)
Tooth Brushing

- Tooth brushing is the most basic form of oral care, but sometimes proper and frequent brushing is neglected.

- Brush, using a soft-bristled toothbrush, with a fluoride toothpaste (twice per day) to prevent plaque buildup.

- Brush at a 45 degree angle towards the gum line in a circular motion. Be gentle.

- Replace your toothbrush every three to four months (Replace sooner if the bristles start to wear out or you are recovering from a cold or illness.)

- Avoid touching the soft palate or placing the toothbrush too far into the mouth as it can trigger gag reflex.
Tooth Brushing

45 degree towards gum line

Recession from overbrushing
Avoid touching the **red zone** when brushing to minimize gag reflex!
Tooth Brushing

- The objective of brushing is to remove as much debris and bacteria as possible.
- Electric toothbrushes provide a great alternative to manual brushing. They produce much of the action needed to sweep away bacteria.
- Use a smaller head and soft toothbrush when ALS patients cannot open mouth wide e.g. Kids toothbrush
- Patients with ALS may develop swallowing difficulties and therefore cannot tolerate conventional brushing. A portable suction device can be used concurrently to evacuate water and saliva from the mouth as the teeth are being brushed
Denture Care

- Clean dentures with denture cleanser and brush teeth every day. Scrub the denture with a toothbrush to remove plaque/food debris.

- If you don’t, plaque can form on dentures which can result in gum and teeth infection, staining and denture odor.

- If the denture is loose, a denture adhesive paste e.g. Polident® can be applied on the denture before wearing it.

- Do not use denture if patient is no longer being fed orally.
Denture Adhesive

Denture Cleanser
Dental Hygiene

- Floss between the teeth (once per day) to remove food and plaque that the toothbrush may miss out
- Avoid Sweet/Sticky/food and drinks
- Reduce frequency of snacking
- Use an anti-cavity mouthwashes/gel/toothmousse
- Watch for good fit of dentures— with weight loss, dentures may not fit as snug
Dental Hygiene-Auxillary

- Electric toothbrush/ Kids toothbrush
- Toothpaste dispenser (pump or hands-free)
- Oral irrigator (e.g. WaterPik®)
- Syringe
- Floss holder
- Interdental Brush
- Tongue Scraper
- Dry Mouth Oral Rinse (e.g. Biotène®)
- Mouth Swabs (e.g. Toothette®)
- Mouth Props
Soft Spong Rubber Handle

Electric Toothbrush

Kids Toothbrush

Flossette

Interdental Brush

Toothette®
(green- with sodium bicarbonate)
(pink- normal)
Portable Salivary Suction Motor
Meridian EcoVac 200

Electric. No battery. Reusable Container. Parts include a Catheter and Suction Pump Filter. Suction Pump filter recommended to be changed once a month or when it gets wet, whichever comes first. Suction tubing can last approximately 1-2 months.

Cost (before GST): $250-$300

Estimate cost of accessories parts:
- Pump Filter $16
- Tubing $25
- Catheter (50 pcs) $35
DeVilbiss VacuAide

Model no. 7305P-U

Electric or battery operated. Built in rechargeable battery capable for use up to 1 hour. Automatic float shut off to prevent overflow into the unit.

Cost (before GST): $800-$1090

Model no. 7305D-I

Electric. No internal battery

Cost (before GST): $490-$550
Laerdal Serres Disposable

Both battery and AC powered. Comes with a disposable liner. Better in terms of hygiene and maintenance as liner can be disposed once full. Liner can be changed once a day. Can fill approximately 700ml-1000ml.

Cost (before GST): $1809

Estimate cost of accessories parts:
- Disposable Liner $15-$20
Laerdal Reusable

Both battery and AC powered. No disposable liner. Has a cannister to contain mucous

Cost (before GST): $1809
Portable Suction Motor Contacts

**Meridian EcoVac 200**
- **Kingston Medical Supplies Pte Ltd**
  - Contact Person: Andrew
  - Main line: 67453922/ Hp: 98503000

- **MedwoRx International Pte Ltd**
  - Contact Person: Joanne Chong
  - Main line: 68533623/ Hp: 84885100 (Hp)

**DeVilbiss VacuAide 7350**
- **Yeap Medical Pte Ltd**
  - Contact Person: Joseph
  - Main line: 68481010/ Hp: 97983918
Laerdal Serres Disposable/Reusable

- Laerdal Singapore Pte Ltd
  Contact Person: Joycelyn
  Main line: 62821912/ Hp: 96558745
Salivary Control

- Medication
  - Anticholinergic e.g. Atropine to reduce oral secretions
  - Flumucil mucolytic which helps to get rid of sticky and thick mucus that is obstructing the airway, resulting in coughing.

- Salivary Suction Motors

- Cough assist machines
Patients with ALS may experience decrease in saliva that results from taking various medications or breathing through the mouth.

A dry mouth encourages plaque bacteria to stick to tooth surfaces.

Saliva substitutes are available to replenish this loss and may make the patient more comfortable. E.g. Biotene®.

Other solution ➔ rinse or brush frequently.
Portable Head Support

- Easily detached, light weight & portable
- Allows compact folding while still attached to the wheelchair
- Foam-padded for maximum comfort
- Mounted by two clamps on the wheelchair back frame
- Designed for wheelchairs with 22-mm rear push handle tubes
Available sizes:

- Large: for wheelchair seat widths between 42cm-50cm
- Medium: for wheelchair seat widths between 36cm-44cm
- Small: for wheelchair seat widths between 30cm-36cm

Cost: $190 (available in Rehab Mart)
Prevention

- It can be difficult and challenging for a caregiver to perform proper oral care.
- Regular exams should ensure that any problems the patient or caregiver may have would not result in further disease or poor dental health.
- If possible, plan a visit once or twice per year.
- Caregivers and patients should not hesitate to inform the dental staff of any special needs the patient may have and also to remind staff members that the patient may tire easily during any procedure.
- Ask the dental team how to overcome any obstacles the patient or caregiver may be having at home. This will help to solve problems and find more options for making oral homecare easier.
Dental Treatment Modification

- Dysphagia → Semi-supine treatment position
- Excessive saliva → Copious suctioning
- Muscle weakness/spasticity → Shorter appointment time or frequent breaks during appointment, mouth prop/assistance with holding mouth open
- Advanced disease → Care provider to learn oral home care
- Gags reflex → Use a gel toothpaste/pea size amount/toothpaste without mint or “extra fresh” label on it to reduce gagging tendency
List of Government Dental Clinics

- Alexandra Hospital (PTE) 64722000
- Changi General Hospital (PTE except extraction) 68503333
- Khoo Teck Puat (PTE except RCT, crown, dentures) 66022828
- Ng Teng Fong /Jurong Medical Centre (PTE) 67162233
- NUH Dental Centre (PTE) 67724921
  (Geriatric and Special Needs Dentistry Available)
  Dentist: Dr. Tay Chong Meng
• National Dental Centre **63248802**
  (Geriatric and Special Needs Dentistry Available. Needs to be referred from hospital/ polyclinic before patient can be referred to a Geriatric/Special needs dentist)

• Tan Tock Seng (PTE) **68894627**
  (Geriatric and Special Needs Dentistry Available)
  Dentist: Dr. Ang Kok Yang
Private General Dental Clinic

- Wheelchair accessibility

- Generally if patient is in the early stages of ALS

- Some dental clinics are CHAS accredited. Refer to [https://www.chas.sg/clinic_locator](https://www.chas.sg/clinic_locator) for list of participating clinics

- CHAS subsidy applies for selected dental services. These include:
  - Crowning, Denture*, Extraction, Filling,
  - Scaling*, Polishing*
  - Root canal treatment
  - Topical fluoride*, X-Ray*

* Limited 2 procedures per patient per calendar year. For denture, limited to one set (upper and lower) per patient per calendar year.
Learn to identify and prevent oral diseases through awareness and good dental hygiene habits, and adjust dental care accordingly to the needs of ALS patients.

The oral cavity is the gateway to our systemic health. Maintaining good oral health will minimize the risk of infection which can enter the body and pose a threat to our overall health.

Start early. On being diagnosed with ALS, it is recommended for patients to go for dental clearance and regular check up to minimize the need for more complex dental care later on.
Useful Links

- **Pharmex Healthcare** (Yishun/Kembangan/KK Hospital)
  Main line: 68410636
  (Oral Swab/DeVilbiss EcoSuction Motor/Meridian EcoVac-200)

- **Guardian/Watson**
  (Tongue scraper/Biotene/Syringes/Polident/Interdental Brush/Flossette)

- **Takashimaya Departmental Store/Watson** (Takashimaya)/OG (Albert Park/People’s park)
  (WaterPik)
• **www.Qoo10.sg**  
  (Toothpaste dispenser/Mouth Props)

• **Rehab Mart**  
  - Balestier: **63524400**  
  - Chinatown: **63247077**  
  - East - Paya Lebar: **64551551**  
  - Upper Thomson: **62500555**

You are not alone. Together, we cope with ALS, help one another support those with ALS and provide a more comfortable environment for them.

THANK YOU😊