

Saliva Control

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Saliva functions

- Lubrication and protection
(Nagler, R.M. 2004)
- Buffering action and clearance
(Mandel, I.D. 1987)
- Maintenance of tooth integrity
(Humphrey, S.P. 2001)
- Antibacterial activity (IgA)
(McNabb, P.C. 1981)
- Taste and digestion
(Mandel, I.D. 1987)

Saliva

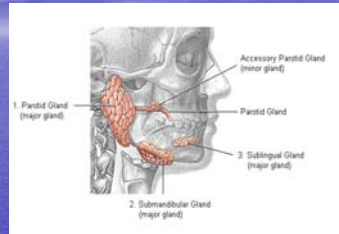


Figure 1 Major Salivary Glands, adapted from the website <http://www.mdconsult.com/>

- Composition (Dawes, C. 1974)
- Production (Hockstein, N.G. 2004)
- Salivary flow (Humphrey, S.P. 2001)
- Regulation of saliva secretion
- Mean daily saliva production 1 to 1.5 litres

Excess saliva

- Not overproduction (Tahmassebi, J.F. 2003)
- Drooling (Crysdale, W.S. 1989)
- Drooling assessment
 - Objective measures (Jongerius, P.H. 2004)
 - Subjective measures (Thomas-Stonell, N. 1988)
- Swallow dysfunction

Management of excess saliva

- Oral-motor / behaviour therapy
 - Harris and Digman, 1980; Koheil et al. 1987
- Drug therapy
 - Jongerius, P.H. 2003
- Radiation therapy
 - Anderson, P.M. 2001; Postma, A.G. 2007; Staplers, L.J. 2002
- Surgery
 - Martin, M.D. 2007; Burton, M.J. 1991
- Botulinum toxin (BTX) injections
 - Benson, J. 2007; Lipp, M.D. 2003

Proposed research

- A randomised study comparing the efficacy of BTX vs. Scopolamine in reducing saliva in tracheotomised inpatients
- Single dosage intra-parotid injections of BTX
- Scopolamine patch, replaced every 72 hours
- Assessment points; pre-intervention, post intervention at 1, 2, 4, 8 & 12 weeks

Participants

Inclusion criteria

- Tracheostomy tube
- Receiving tracheal suctioning
- Non-ventilated
- Acquired neurologic diseases
- Consent from client / family

Exclusion criteria

- Ventilated patients
- Managing secretions
- Allergy to drug
- Pregnant women
- Non-consenting client / family

Outcome measures

- Measuring weight of intra-oral dental rolls
- Frequency / amount of tracheal suctioning
- Questionnaires
 - Patient / family perceptions of saliva management
 - Nursing perceptions saliva management / tracheal suctioning

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