



Saliva Control

This information has been compiled to assist professionals working with people affected by Motor Neurone Disease and represents suggestions only. It should not replace individual assessment for treatment.

Saliva and mucus problems are a result of poor lip seal and/or impaired ability to swallow. This can lead to drooling and many people feel embarrassed and ashamed as a result.

Be aware that medications to dry excessive salivation can lead to thick tenacious saliva, therefore a combination of therapies may be appropriate.

Excessive watery saliva

Atropine as:

Tablets	0.3mg - 0.6mg b.d.
Sulphate Suspension	0.3mg/5ml b.d. (other strengths available)

Hyoscine as:

Hydrobromide "Kwells"	0.3mg 2-3 times a day	orally, sub-lingual
	0.4 - 0.6mg	SC, IM, 4 hourly
	made up to 4ml with 0.9% saline	nebulized, given over 15 minutes
Hydrobromide	0.4 - 2.4mg/24 hours	continuous subcutaneous infusion
Butylbromide "Buscopan"	10 - 60mg/24 hours	via syringe driver
*patches "Scopoderm"	1.5mg Consumer Health 01403218111	Note: can cause confusion in the elderly
"Transcop"	1.5mg IDIS 0208 4100700	unlicensed drug

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Glycopyrronium:1

"Robinul"	50-100 micrograms starting dose Titrate to appropriate	SC Syringe Driver
	0.6 – 1mg orally 3 times a day	Can also be administered orally or via a PEG in an unpreserved suggested solution of 1mg to 10ml. Note: Watch for Constipation

Tricyclic antidepressants (side effect dries mouth)

Amitriptyline	25mg at night & increasing every few days to 100mg/day
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Additional Suggestions

- Alter the person's position to make it easier for them to swallow.
- A collar that supports the head in a comfortable position
- Swallow therapy – see Speech and Language Therapist
- Oral Swabbing
- Use of suction pump to clear secretions
- Adapt clothing to incorporate discreet water-proof-backed insert

Natural Products

- Dark Grape juice
- Homeopathic remedies
- Sage caps/ tablets/ powder available from Health Food Shops

Tenacious Saliva

This can be very distressing and may be caused by dehydration, mouth breathing or saliva evaporating in the mouth.

Beta blockers 2

Propranolol	10mg b.d.
Metoprolol	25mg b.d.

Mucolytics (break down protein in mucoid secretions)

Carbocisteine "mucodyne" (Non NHS)	250mg/5ml
Papain	G & G Food Supplies, 174 London Road, East Grinstead, West Sussex Tel: 01342 312811
Papaya "Papaya Plus"	Health food shops
Bromelaine - Natures own brand	Health food shops
Meat tenderiser powder	Supermarkets

Additional Suggestions

- Rehydration: Increase fluid intake. Jelly/Ices
- Reduce use of dairy products
- Reduce Alcohol/ Caffeine
- Butter - small amount in the mouth loosens adhering mucous
- If possible eliminate mouth breathing

Natural Products

- Apple sauce/juice, grapefruit juice, cranberry juice, pineapple juice/puree, dark grape juice
- Suck Sugar-free citrus lozenges

Techniques and Technologies

- Nebulization (with Saline Solution)
- Steam inhalation
- Surgery – transtympanic neurotomy 3
- Botulinum toxin injection into paratoid / submandibular salivary gland 4

Reference List

1. Lucas V et al (1998) Use of enteral glycopyrrolate in the management of drooling. *Palliat. Med.* May:12(3):207-8
and
Blasco PA and Stansbury JCK (1996) Glycopyrrolate treatment of chronic drooling. *Archives of Paediatrics and Adolescent Medicine.* 150:932-935
2. *Journal of the Neurological Sciences (Canada), supplement to Vol 139, 1996 (pilot study, 75% success rate on 16 pts.)*
3. Zalin H, Cooney TC (1974) Chorda tympani neurectomy - a new approach to submandibular salivary obstruction. *Br J Surg* 61:391-394.
4. Geiss R, et al (1999) Injections of botulinum toxin A into the salivary glands improve sialorrhoea in amyotrophic lateral sclerosis. *Neurol. Neurosurg Psychiatry* 2000; 69;121-123

Other sources of information:-

Talmi Y P et al (1989) Reduction of salivary flow in Amyotrophic Lateral Sclerosis with Scopoderm TTS. Head Neck. Nov-Dec: VII (6).

* Patches can be applied as an alternative to behind the ear to; (in order of preference) back; chest; stomach; forearm; thigh. There will be a 60% loss of absorption from back and decreasing loss in other areas.

**Advice & Information Line for Health & Social Care Professionals,
telephone: 01604 611870**

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