

SALIVA AND MUCUS MANAGEMENT IN MOTOR NEURONE DISEASE

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SALIVA PROBLEMS

- May affect up to 50% of patients with MND
- Approx 2-3 pints of saliva produced a day
- Bulbar muscle weakness can causes pooling of saliva/ difficulty managing saliva in the mouth (dysphagia)
- Thick and sticky or thin and pools
- Thick mucus in throat
- Causes choking; drooling; increases risk of aspiration; embarrassment; discomfort

ASSESSMENT OF SALIVA ISSUES

- Detailed discussion with patient to determine:
 - thick, sticky and tenacious?
 - thin and watery – drooling (sialorrhoea)
 - Mixture of the 2
 - How much saliva? Time of the day?
 - Thick mucus?
- Speech and Language Therapy Assessment
 - Assessing swallow and lip seal etc
 - Oral care routine
- Frontal Temporal Dementia/ cognitive impairment
- Respiratory Assessment
- Occupational Therapy Assessment

INTERVENTIONS

- Reducing production of saliva
- Changing character of saliva
- Aiding clearance

THIN SALIVA MANAGEMENT

- **Speech and language Therapist**
 - Swallow techniques
 - Barrier cream to protect skin
 - Risk of aspiration
- **Occupational Therapist:**
 - Good posture to improve flow of saliva
 - Neck collars
 - Rise and recline chair/ wheelchair to improve posture
 - Positioning at night

THIN SALIVA MANAGEMENT

- **Respiratory Team Assessment**
 - Suction machine provision
 - Subtle clothing protectors
 - Medications prescribed by GP,
 - Consultant Neurologist, Palliative
 - Care Consultant or Nurse Prescriber



THIN SALIVA MEDICATIONS

Anti-muscarinic medication as first line treatment (NICE guidelines 2016)

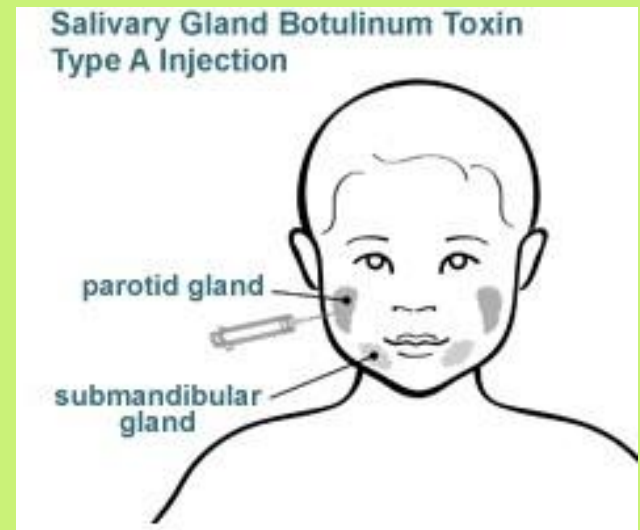
- Hyoscine Hydrobromide (Scopoderm)
- Hyoscine Butylbromide (Buscopan)
- Atropine eyedrops
- Glycopyrronium Bromide (glycopyrrolate)
- Tricyclic Antidepressant (Amitriptyline)
 - Side effects: Constipation, confusion in elderly, skin dryness, urinary retention or urgency (see BNF for further)

In cognitive impairment Glycopyrronium first line treatment

THIN SALIVA MANAGEMENT

If medications and other intervention fail then Botox injection into the salivary glands

- Done by Specialist
- Botox Toxin A first line
- Botox Toxin B if natural immunity
- Can last up to 3 months
- PEG in situ is required
- Dr Soryal in QE



Radiotherapy of saliva glands (x-rays to destroy saliva glands)

THICK SALIVA AND MUCUS MANAGEMENT

- **Speech and Language Therapy Assessment**
 - Swallow assessment
 - Oral hygiene advice (District Nurses)
 - Mouth breathing?
 - Review of current meds (overdrying with anti-muscarinics?)
 - Hydration? PEG needed urgently
 - Lollies, jelly, frozen mousses, sucking ice
 - Pineapple juice and papaya juice before meals
 - Wiped around mouth with pink sponge
 - Sucking on sugarless sweets (choking risk though)

THICK SALIVA AND MUCUS MANAGEMENT

Respiratory Team Assessment

- NIV drying mouth?
- Humidification through NIV
- Saline nebs prescribed
- Weak cough for mucus:
- Unassisted breath stacking
- Assisted breath stacking
- Cough Assist
- Suction Unit

Dr Mustfa, Respiratory Consultant and CNS team: Royal Stoke Hospital

THICK SALIVA AND MUCUS MEDICATIONS

- Mucolytics (carbocisteine)
 - Caution: peptic ulcer
- Saline – through nebuliser



DRY MOUTH

- Artificial saliva
- Oral hygiene
- Fluid increase
- Checking for oral thrush
- Medication review

GOOD SALIVA AND MUCUS MANAGEMENT

- Improvement of quality of life
- Reduction in aspiration pneumonia
- Reduction in hospital admission

FURTHER RESOURCES

- **Managing Saliva Problems in Motor Neurone Disease**
– MNDA information booklet P3 for professionals.
- **NICE Guidelines for Motor Neurone Disease, February 2016. Saliva Management**
- **National Clinical Guideline Centre; ‘Motor Neurone Disease: assessment and management, Clinical Guidelines. February 2016. section 14 – Saliva Management**

ANY QUESTIONS?

MOTOR NEURONE DISEASE CARE CENTRE BIRMINGHAM

- **Queen Elizabeth Hospital Birmingham**
- **One of the 22 MND Care Centres funded by the Motor Neurone Disease Association**
- **2 Consultant clinics every Wednesday afternoon, attended by Specialist Nurses**
- **Monthly MDT clinic attended by the whole MND MDT team**

MOTOR NEURONE DISEASE CARE CENTRE BIRMINGHAM

- **Referrals: Other consultant Neurologists; GPs; other hospitals; ENT; Neurosurgery etc.**
- **Referral can be to Consultant Neurologists or only to CNS team**

THE MND CARE CENTRE TEAM

- **Specialist Nurses: Caroline Davis – Care Coordinator and Nicola Ryder – Specialist Nurse**
- **Consultants Neurologists: Dr Hardev Pall and Dr Venkat Srinivasan**
- **Respiratory Consultant: Dr Mustfa, Royal Stoke Hospital**
- **Palliative Care Consultant: Dr Jon Tomas**
- **MNDA, Regional Care Development Advisors: Alison Noakes and Jackie Dornford-May**
- **Physio- Claire Mobberley**
- **Occupational Therapist: Russell Wigley**
- **Speech and Language Therapist; Sally Brakjovich**
- **Dietician: Erin Forker**

ROLE OF THE MND CNS

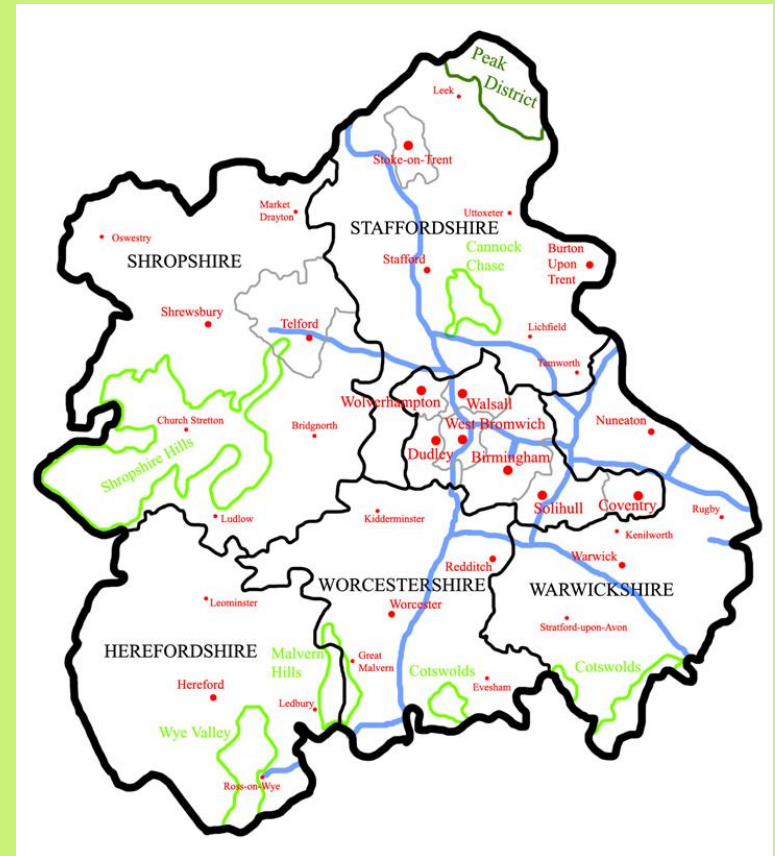
- Every patient offered a home visit within 2 weeks of diagnosis, or referral to us
- Home visit:
 - Offer support
 - Answer questions
 - Discuss community team
 - Referral into community team and local pathway
 - Discussion of PEG if bulbar
 - Benefit discussions
 - MNDA referral consent

ROLE OF THE MND CNS

- Ongoing support in clinic, or home if required (dependent on community team support)
- Attends local MDT to support community team
- See patients in hospital for advice
- Joint visits with other health professionals
- Phonenumber/ email / text available for questions etc. Triaging to services/ clinics etc

AREAS COVERED BY CARE CENTRE

- 310 patients on active caseload
- 13 MDT teams
- Birmingham
- Black Country
- Solihull
- Herefordshire
- Worcestershire
- South Warwickshire
- Parts of Staffs and Shropshire



ROYAL STOKE HOSPITAL CARE CENTRE

- Due to open in February 2018
- Areas to be decided
- Outreach clinics?
- Dr Naveed Mustfa – Respiratory Consultant Care Centre Director
- New Care Co-ordinator to be appointed
- 22nd care centre of MNDA
- Watch this space!