Mouth care case study – Progressive neurological condition

Patient background

- 75-year-old man who lives alone with support from a circle of close friends. He is independently mobile but starting to experience some upper limb weakness.
- Initially diagnosed with primary progressive aphasia following rapid decline of speech and language. Re-diagnosed 6 months later with bulbar onset motor neurone disease following development of swallowing difficulties.
- On referral to the community neurological rehab team he was non-verbal and non-oral following a long hospital admission where a radiologically inserted gastrostomy (RIG) was inserted.

Speech and language therapy input into patient's mouth care within a multidisciplinary team (MDT)

- Tastes of food/fluid for quality of life were discussed but the patient decided to remain nil by mouth as swallowing had become too effortful and distressing.
- The patient initially completed his own oral care twice a day. As he was to remain nil by mouth the speech and language therapist (SLT) gave advice to increase oral care to at least four times a day to prevent chest infections from aspirated secretions; brushing gums, dentures, tongue with soft toothbrush and low foaming toothpaste.
- As upper limbs began to weaken the occupational therapist (OT) provided padding to go round his toothbrush to aid grip and strategies to support the elbow. The physiotherapist and OT assessed for and provided equipment such as a perching stool so he could sit at the bathroom sink.
- As the disease progressed further, carers were required to support with oral care. The SLT provided him with pictures that enabled him to request oral care and explain the process to new carers. The physiotherapist and OT provided information on positioning.
- The patient began experiencing issues with thin, watery saliva; saliva pooling in the oral cavity either drooled anteriorly or fell into the airway resulting in coughing and overt signs of aspiration
- The patient found the drooling and coughing incidences distressing and he began to see friends less.

- Medications to dry secretions were trialled by general practitioner (GP) (atropine drops not effective, replaced by hyoscine patch) but issues continued.
- Referral to Ear, nose and throat services (ENT) requested for consideration of Botox.
- Concerns raised by carers of a persistent ulcer. Seen by ENT who diagnosed granulation from dentures that had become loose due to muscle changes.
- The patient wanted to wear the dentures for appearance so he was reviewed by his dentist who altered the dentures and provided advise to help the ulcer heal such as Bongela to 'cover' it.
- Following increased non-invasive ventilation (NIV) use, he began experiencing thick secretions. Botox was stopped, medications to moisten mouth prescribed along with advice from respiratory team for humidifier.

Outcomes

- The patient facilitated to carry out own oral care for as long as possible. When this changed he was able to communicate to carers when and how to complete.
- He received 3 treatments of Botox. He didn't initially feel there was much change but later reported an improvement (clinical saliva scale for motor neurone disease (MND): 18 to 12).
- Being able to wear dentures and reduced drooling increased his confidence to see his friends again.

Learnings

- Mouth care requires an MDT approach for people with progressive neurological conditions to maintain function and promote independence.
- Importance of maintaining appearance in quality of life; wearing dentures, reducing drooling helps someone feel more dignified/socially accepted.
- It is easy to overlook other issues or complications such as persistent ulcers in patients with complex needs. Remain vigilant to signs and symptoms to allow for early diagnosis and treatment.