



Mouth care case study – Intensive care unit (ICU)

Patient background

- 59 year old gentleman with no significant medical history. He was admitted after 5/7 days of feeling generally unwell and following 3 swabs tested positive for COVID-19.
- He was admitted to ICU with increasing shortness of breath and decreasing oxygen saturation and due to difficulties with ventilation a decision was made to intubate. He had an endotracheal tube (ETT) for 16 days. He was prone for 7 days in an attempt to improve his ventilation.
- He had a surgical Tracheostomy (8.0 Tracheotwist) inserted and following a long ventilatory weaning plan was decannulated successfully prior to leaving ICU.
- He had renal failure and required renal replacement therapy (RRT) and remained in ICU for 97 days.

Speech and language therapy input into patient's mouth care

- Whilst intubated/sedated, staff reported difficulties accessing his mouth to perform mouthcare. He demonstrated intolerance to touch around face and bite reflex behaviours. A desensitisation routine was provided to support oral access and educated nursing staff on how to perform. Skin integrity was monitored but there were no issues. The use of low foaming toothpaste was advised.
- Once a tracheostomy was inserted, there was liaison with the multidisciplinary team (MDT) re secretion management. No direct intervention was required as it was felt he could manage his own oral secretions. He was progressed onto Passy Muir Valve trials (speaking valve) to facilitate his tracheostomy weaning and voicing to support communication. Communication was facilitated via the use of a speaking valve and writing (when speaking valve not in situ) to involve the patient in care decisions relating to mouthcare and the ongoing management of his communication and swallowing.
- There was limited access to instrumental assessment initially due to COVID-19 guidelines. The team relied on bedside clinical evaluations to support decision around oral intake. Multiple attempts to commence oral trials resulted in overt signs of aspiration and deterioration in respiratory function. It was agreed with the patient that a period of nil by mouth (NBM) was required to facilitate weaning whilst instrumental assessment was arranged to guide management. His NBM status along with high oxygen requirements resulted in xerostomia.
- A number of dry mouth options were explored with the patient and he agreed on Biotene dry mouth gel which was sourced via pharmacy. A few other oral hydration options were explored to support mouth care and oral comfort including mouth swills (clearing with yankeur suction) and small bolus of water via syringe following mouthcare. These were options the patient wanted to explore, accepting associated risks, to improve his comfort and quality of life. These decisions were monitored and regularly reviewed with him at bedside.



- Any advice/agreed plan with the patient was documented clearly on his daily timetable so that staff were fully aware of agreed plans.

Outcomes

- Hypersensitivity resolved. Nursing staff were able to access his mouth and complete his daily oral care needs sufficiently.
- Dry mouth was a challenging factor throughout his period of being NBM. However, he did acknowledge that some of the products used, such as the Biotene Gel, offered some relief.
- Once he began to regain strength, and the viral fatigue settled, he was able to manage his own mouth care routine independently.
- Following successful weaning off the ventilation it was possible to access Videofluoroscopy which facilitated return to oral intake.

Learnings

- The speech and language therapists involved hadn't fully appreciated the value of their role in the early days of ICU when patients are first intubated (ETT) in preventing complications associated with hypersensitivity. Most were more familiar with using the desensitisation protocol on the acute neurosurgery wards and now recognise its importance earlier on in the pathway.
- Nurses and other allied health professionals (AHPs) in some areas have limited knowledge about the management of hypersensitivity and the role we offer in facilitating oral access to enable staff to perform oral care to patients.
- There are many options to consider when treating xerostomia. It is important to review options and choices and if one doesn't work explore another.
- This gentleman reminded the team how important it is to have a patient-centred approach and to involve them fully in all areas of care, including mouth care. He was fully informed along the way of the risk associated with dysphagia and poor oral care in context of his condition and recovery and supported to make the right decisions for him that balanced up the risks against factors that mattered to him particularly around oral comfort and quality of life.