

# NMTRG Guidelines for the assessment and rehabilitation of the Pelvic and Sacral Injuries Major Trauma patient

## **Discipline: Speech and Language Therapist**

### **Guideline 1: Management of Pelvic and Sacral Injuries**

The Speech and Language Therapist should have knowledge/awareness of the following;

- The implications of fracture stability and management on positioning of the patient for eating, drinking and swallowing.
- The effect of positioning restrictions (e.g. external fixators limiting seating) on swallowing function/safety and nutrition/hydration.
- Surgical interventions and post-operative complications that may impact on swallowing and communication e.g. post-operative delirium.
- Comorbidities that can affect swallowing and communication in Major Trauma patients e.g. COPD, dementia, degenerative neurological disorders, brain injury, maxillofacial injuries.
- The impact of critical illness/endotracheal intubation/tracheostomy on swallowing and communication in critically ill and post-critical care Major Trauma patients.
- Factors that increase the risk of aspiration in Major Trauma patients (e.g. non-ideal positioning, dependency on others for feeding, pre-existing dysphagia, prolonged or traumatic intubations, critical illness myopathy and polyneuropathy).
- Indications for instrumental assessment of swallowing or other onward referrals e.g. ENT.
- Texture modification and compensatory swallowing strategies.
- Swallowing rehabilitation approaches.
- Communication assessment and therapy in Major Trauma patients e.g. cognitive communication disorders following traumatic brain injury.

## The Speech and Language Therapist should be able to recognise;

- Signs and symptoms of swallowing difficulties.
- The impact of positioning and seating restrictions on swallowing and nutrition/hydration.
- The impact of pre-morbid conditions and comorbidities on swallowing and communication.
- Communication difficulties as a result of polytrauma injuries.
- When instrumental assessment of swallowing is required.
- The impact of critical illness on swallowing, communication and cognition.

### The Speech and Language Therapist should be able to offer the following interventions

- Bedside swallowing assessment.
- Refer for videofluoroscopy/Fibreoptic Endoscopic Evaluation of Swallowing (FEES) as appropriate.
- Advise on mouth care, positioning, feeding options, texture modification and swallowing strategies.
- Advise on saliva management and tracheostomy weaning in Major Trauma patients with tracheostomies.
- Advise on swallow rehabilitation exercises and approaches.
- Assessment of communication difficulties (e.g. cognitive communication disorder, aphasia, dysarthria, dysphonia).



- Provide communication advice and strategies to patients and the MDT.
- Provide direct communication therapy where appropriate.
- Contribute to assessment and facilitation of mental capacity in patients with communication difficulties.
- Educate the wider MDT in the recognition and management of swallowing and communication difficulties in Major Trauma patients.
- Rehabilitation Prescription provision

The Speech and Language Therapist is expected to complete this assessment and intervention;

- Early in the patients admission inclusive of ITU/HDU.
- As part of a 7 day service inclusive of weekend cover (dependent on local service provision).
- Recording on-going weekly/ monthly goals on the Rehabilitation Prescription.

The Speech and Language Therapist should have knowledge of additional services including;

- Dietetic service
- Physio/OT/seating specialists
- Community Speech and Language Therapy services
- Nutrition specialist nurses

The Speech and Language Therapist understands how to access the following pathways

- Community Speech and Language Therapy services
- Help at home on discharge

If required the patient has access to;

Community Speech and Language Therapy Service

Consideration for long term rehabilitation

- Links with preventative teams
- Patient support groups / group rehabilitation

## <u>References</u>

Bordon, A., Bokhari, R., Sperry, J., Testal, D., Feinstein., A. and Ghaemmaghami, V. (2011). Swallowing dysfunction after prolonged intubation: analysis of risk factors in trauma patients. *The American Journal of Surgery*, 202 (6), p679-683.

Kwok, A. M., Davis, J. W. Cagle, K. M., Sue, L. P. and Kaups, K. L. (2013). Post-extubation dysphagia in trauma patients: it's hard to swallow. *The American Journal of Surgery*, 206 (6), p924-928.



Laan, D. V., Pandian, T. K., Jenkins, D. H., Kim, B. D., and Morris, D.S. (2017). Swallowing dysfunction in elderly trauma patients. *Journal of Critical Care*, 42, p324-327.

Langmore, S. E., Terpenning, M. S., Schork, A., Chen. Y., Murray, J. T., Lopatin, D., and Loesche, W. J. (1998). Predictors of Aspiration Pneumonia: How Important Is Dysphagia? *Dysphagia*, 13 (2), p69-81. Leder, S. B., Cohn, S. M., and Moller, B. A. (1998). Fiberoptic Endoscopic Documentation of the High Incidence of Aspiration following Extubation in Critically III Trauma Patients. *Dysphagia*, 13(4), p208-212.

McRae, J. Montgomery, E., and Garstang, Z. (2019). The role of speech and language therapists in the intensive care unit. *Journal of the Intensive Care Society,* 21 (4), p344-348
Rassameehiran, S., Klomjit, S., Mankongpaisarnrung, C & Rakvit, A (2015). Postextubation Dysphagia, *Baylor University Medical Center Proceedings,* 28 (1), p18-20.

Royal College of Speech and Language Therapists (2019). *Position statement: Speech and language therapists working in adult and paediatric critical care units*. Available at: <a href="https://www.rcslt.org/wp-content/uploads/media/docs/clinical-guidance/rcslt-position-statement-critical-care.pdf">https://www.rcslt.org/wp-content/uploads/media/docs/clinical-guidance/rcslt-position-statement-critical-care.pdf</a> (accessed 16th May 2021).

Royal College of Speech and Language Therapists (2021). *Clinical information: Brain Injury.* Available at: https://www.rcslt.org/speech-and-language-therapy/clinical-information/brain-injury (accessed 16th May 2021).