After Intubation: Case Studies and Lessons from the ICU

The number of mechanically ventilated patients continues to grow. ICU acquired weakness, laryngeal injury, and post intensive care syndrome are threats to patient recovery. Dysphagia after extubation is frequent and – in the worst cases – occurs with important consequences, including chronic dysphagia leading to acute aspiration, lung injury, and death.

Critical illness and its medical interventions leave patients who survive vulnerable to new issues, including dysphagia, dysphonia, and cognitive impairment. Moreover, the intensive care unit is a challenging environment, especially considering the dynamics of medication, intubation with mechanical ventilation, delirium and other cognitive impairments, mental impairments, and physical impairments. And these do not consider the dynamics of functioning as a clinician in the ICU. Planning and considerations for screening, assessing, and treating dysphagia must consider immediate and long-term time frames and the coordination of a multidisciplinary team. This presentation of cases will provide the range of simple and straightforward to challenging to the bizarre, each with their own lessons in patient care and swallowing physiology.

Dr. Martin Brodsky

Dr Martin Brodsky is Section Head of Speech-Language Pathology in the Head and Neck Institute at Cleveland Clinic and Adjunct Associate Professor of both Physical Medicine and Rehabilitation and Pulmonary and Critical Care Medicine at Johns Hopkins University. He is also member of the Outcomes After Critical Illness and Surgery (OACIS) Group, a multidisciplinary clinical and research group dedicated to understanding and improving patient outcomes after critical illness and surgery at Johns Hopkins University. His peer-reviewed research publications and book chapters largely focus on swallowing and swallowing disorders and laryngeal injury after endotracheal intubation in critical care. Dr. Brodsky’s research is funded by the NIH studying the effects of critical illness and critical medicine on swallowing and the airway and their long-term outcomes and the FDA studying the progression of dysphagia in neurodegenerative and rare disorders. He is a Fellow of the American Speech-Language-Hearing Association, an Associate Editor for Dysphagia, and a Section Editor for Archives of Physical Medicine and Rehabilitation.

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Non-financial – Dr. Brodsky is on the Advisory Board for SwalTech, LLC He’s the Associate Editor for Dysphagia, and a Section Editor for Archives of Physical Medicine and Rehabilitation.

Learning Objectives:
- Identify at least 3 types of moderate-to-severe laryngeal injuries that occur post-extubation.
- Examine known clinical information to assist with patient evaluations post-extubation.
- Examine swallowing physiology within the context of intubation.
**Agenda:**
Introduction to laryngeal injury and cognitive impairment post-extubation – 10 minutes
Cases and lessons learned – 45 minutes
Discussion and closing – 5 minutes