Successful Ventilator Weaning in Dysphagic Spinal Cord Injured Patients

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Abstract

Introduction: Cervical spinal cord injury (CSCI) patients often require ventilation via a tracheostomy and their ability to wean is compromised by the presence of dysphagia. The tracheostomy cuff is often kept inflated in order to keep secretions from being aspirated. This has a detrimental effect on laryngeal functions such as cough, swallow and speech. An alternative method of weaning, whereby the cuff is deflated early, together with intensive dysphagia therapy, encourages the return of laryngeal function.

Methods: A retrospective review of 230 patient referrals made to the Speech and Language Therapy (SLT) Service at the London Spinal Cord Injury Centre between March 2002 and January 2014. An analysis of patient demographics, diagnoses, and outcomes for return to oral intake, weaning success and communication ability when using a laryngeal wean approach.

Results: Total of 230 patient referrals: 71% male; Mean age 51 years. CSCI 72% complete AIS A injury 55% SLT diagnoses: dysphagia 86%, dysphonia 27% vocal cord pathology 17% tracheostomy 42%, with dysphagia 94% On discharge: successfully decannulated 75% ongoing ventilation via tracheostomy (24 hours/overnight) 18% return to complete oral intake 84% partial oral intake 15% Using speech for communication 100%.

Conclusions: Teams should consider employing a laryngeal wean alongside intensive dysphagia therapy for those with CSCI and dysphagia. By trialling early cuff deflation when weaning from ventilation this enhances sensation in the larynx, encourages speech and improves swallowing. This has a positive impact on patients’ health and emotional status.