

A novel therapeutic surgical approach to improve swallowing following Head and Neck Cancer treatment

Swallowing problems following treatment in Head and Neck (HN) Cancer significantly impacts the quality of life, with some patients unable to eat and requiring alternative nutritional tube support. Treatment strategies to mitigate swallowing difficulties (dysphagia) following HN Cancer therapy include exercises to target range of movement and increasing the strength of the swallowing muscles. Unfortunately, these exercises have limited impact on the swallowing difficulty symptoms and therefore new approaches are needed.

Pharyngeal Augmentation for Dysphagia (PAD Therapy) is a novel therapeutic surgical approach being tested at Flinders Medical Centre, Adelaide. It is designed to improve the pressure generation in the throat (pharynx) by injecting a small amount of a temporary artificial filler into the back of the tongue. Our research group has developed novel analysis methodology using High Resolution Manometry to assess pressures generated throughout the pharynx during swallowing. This technique can diagnose those patients who have throat pharyngeal weakness and identify the location of the *PAD Therapy* injection site.

This study aims to test if *PAD Therapy* improves swallowing assessed by High Resolution Manometry and patient-reported symptoms. Should *PAD Therapy* be demonstrated to improve dysphagia in HN Cancer patients in this pilot study then further trials of *PAD Therapy* could be conducted using a permanent filler agent for a longer lasting effect.