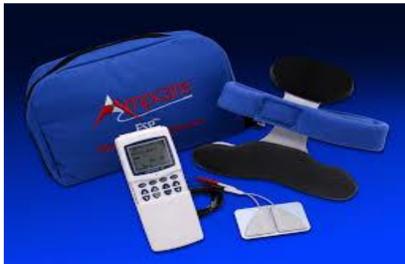
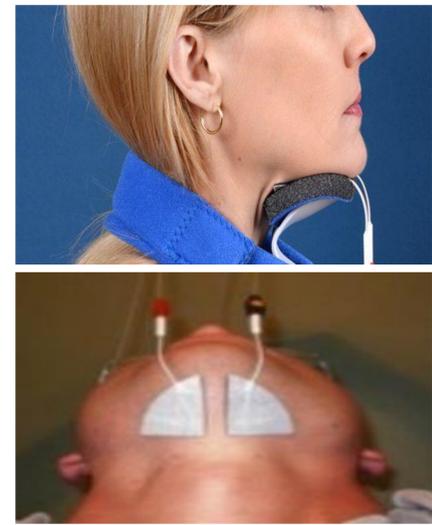


# Ampcare© Effective Swallowing Protocol for Oropharyngeal Dysphagia: a case study across the stroke pathway

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## Background

- Ampcare© Effective Swallowing Protocol (ESP) combines transcutaneous neuromuscular electrical stimulation with resistive swallowing exercises
- The treatment targets type II fast twitch muscle fibres within the suprahyoid musculature (anterior digastric, geniohyoid, mylohyoid)
- Recommended treatment consists of 20 x 30 minute sessions
- Ampcare© ESP has been used within East Lancashire Hospitals NHS Trust (ELHT) since 2018, for patients across the stroke pathway. All data is collected and submitted for audit (as per NICE guidance)
- This case study details use of Ampcare© ESP across the stroke pathway with one patient



## Patient M

- 23 years old
- No significant medical history
- Admitted to Royal Blackburn Hospital, ELHT, with left vertebral artery dissection and left posterior inferior cerebellar artery infarct

## Ampcare therapy

- 17 x 30 minutes sessions
- 4 sessions during inpatient rehabilitation; 13 sessions during community rehabilitation after removal of nasogastric tube
- Did not require full quota of 20 sessions due to improvement in presentation

## Outcome Measures

- The following outcome measures are obtained for all Ampcare© patients and submitted for audit: Functional Oral Intake Scale (FOIS)<sup>1</sup>, patient-rated severity scale taken from Dysphagia Handicap Index<sup>2</sup> and Therapy Outcome Measures (TOMs)<sup>3</sup>
- Scores are taken pre-treatment, immediately post-treatment, and 4 and 12 weeks post-treatment

### Pre-treatment

- Severe oropharyngeal dysphagia, characterised by delayed swallow trigger and weak/reduced laryngeal elevation
- Tolerating up to 3 teaspoons level 2 fluid only
- Dependent on nasogastric tube for nutrition/hydration
- Inpatient at acute stroke unit

FOIS = 3

Patient severity rating = 7  
Dysphagia TOMs = 13.5

### Immediately post-treatment

- Nasogastric tube removed: meeting nutrition/hydration requirements orally
- Tolerating thin fluids and largely regular diet
- Difficulty with drier textures
- Living at home following short period at inpatient rehabilitation unit

FOIS = 6

Patient severity rating = 1.5  
Dysphagia TOMs = 19.5

### 4 weeks post-treatment

- Tolerating thin fluids and full regular diet at 4 weeks post-treatment
- Treatment effects maintained at 12 weeks post-treatment
- Returned to work at 12 weeks post-treatment
- Residual mild dysphonia at 12 weeks post-treatment

FOIS = 7

Patient severity rating = 1  
Dysphagia TOMs = 20

## Conclusion

- Positive outcome for this patient, in addition to the other 8 patients who have completed Ampcare© therapy
- This case demonstrates that the treatment is feasible across all areas of the stroke pathway within ELHT, although there are staffing and training implications, e.g. ensuring sufficient staffing to deliver intensity of treatment across inpatient and community settings
- Continued evaluation of individual and collective data will be used to inform future clinical practice