THE EFFICIENCY AND COST-EFFECTIVENESS OF HEALTHCARE AND NUTRITIONAL INTERVENTIONS IN THE MANAGEMENT OF POST-STROKE OROPHARYNGEAL DYSPHAGIA, RESULTS OF A SYSTEMATIC REVIEW

S. MARIN 1,2, O. ORTEGA 2, M. SERRA-PRAT 3, E. VALLS 1, L. PÉREZ-CORDÓN 4, C. CODINA-JIMÉNEZ 1 AND P. CLAVÉ 2

1. Pharmacy Department, Hospital Universitari Germans Trias i Pujol, Badalona, Spain
2. Gastrointestinal Physiology Laboratory, Mataró Hospital, Mataró, Spain
3. Research Unit, Mataró Hospital, Mataró, Spain
4. Pharmacy Department, Mataró Hospital, Mataró, Spain

Background and importance
Post-stroke oropharyngeal dysphagia (PS-OD) causes significant high costs during hospitalization that increase with the development of malnutrition and respiratory infections at long-term
The appropriate management of PS-OD could lead to cost-effective reduction of clinical complications 1

Aim and objectives
To assess literature on the efficiency and cost-effectiveness of available healthcare interventions on the management of PS-OD

Materials and methods
Systematic review of economic evaluation studies from inception through June 2021 following PRISMA recommendations

Results
SCREENING AND ASSESSMENT OF PS-OD
Svendsen, lower hospitalization costs (HC) (USD12,556 CI95% 9,751-15,361) when PS-OD was assessed during the first 24 hours after admission
Liu, no differences in HC when PS-OD was assessed with the water swallowing vs. volume-viscosity swallowing test if the water test failed
Schwartz, non-significant reduction on HC (Australian dollars 18,053 vs. 16,548, p=0.722) using a protocol to manage OD after thrombolysis
Wilson, videofluoroscopy was the most cost-effective screening method compared to bedside evaluation and a combination of both

REHABILITATION PROGRAMMES
Khiaocharoen and Suksathien, cost-effective rehabilitation programmes that included OD management

FOOD-CONSISTENCY MODIFICATION AND THICKENED FLUIDS
Pelczarska, the use of texture-modified diets using a gum-based thickener (Nutilis Clear®) was cost-effective (PLN21,387-20,977 per QALY)
Kotecki, commercially thickened fluids use was more efficient than in situ preparation

ENTERAL TUBE NUTRITION
Elia, domiciliary enteral nutrition was cost-effective (£12,817 per QALY)
Beavan, higher nutrient intake and low HC increase using looped-nasogastric tube (5.20 sterling for every 1% increase)

Conclusion and relevance
Healthcare interventions to manage PS-OD with a positive clinical effect tend to be cost-effective. Future studies assessing the cost-effectiveness of applying compensatory and/or restorative strategies among with reporting cost-savings by appropriate PS-OD early evaluation and management are needed.

References