





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

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## **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 longterm

The appropriate management of PS-OD could lead to costeffective reduction of clinical complications <sup>1</sup>

## 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% 9751-15,361) 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 THICKNED 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.



Abstract number: 4CPS-116

#### References

1.Marin S, et al Economic evaluations of health care interventions in oropharyngeal dysphagia after stroke: protocol for a systematic review. Syst Rev. 2022;11(1):92