Optimizing Nutritional Status in a Patient with Severe Dysphagia and Dementia: A Case Report

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Background

Dementia-related dysphagia is a progressive complication of advanced neurocognitive decline characterized by impaired swallowing coordination. As swallowing function deteriorates, individuals are at increased risk for aspiration pneumonia, dehydration, inadequate oral intake, and malnutrition. Initial medical nutrition therapy (MNT) interventions include modification of food and fluid consistencies in accordance with the International Dysphagia Diet Standardization Initiative (IDDSI) framework, in combination with postural and behavioral strategies to reduce aspiration risk. However, consistency modification alone may be insufficient to meet estimated energy and protein requirements.

When oral intake fails to provide adequate nutritional support, enteral nutrition (EN) via percutaneous endoscopic gastrostomy (PEG) may be considered based on prognosis, goals of care, and ethical considerations.[1] Enteral nutrition is preferred over parenteral nutrition when the gastrointestinal tract is functional. Comprehensive assessment including anthropometric trends, weight history, laboratory data, estimated nutrient needs, fluid balance, refeeding risk, and functional status is essential for formula selection and ongoing monitoring. Due to the complexity of advanced dementia, decisions regarding PEG placement require interdisciplinary collaboration and careful evaluation of potential benefits, risks, and patient-centered outcomes.

Nutrition Considerations

Severe dementia and dysphagia often leads to inadequate intake, increasing risk for malnutrition. The risk for aspiration also increases with dysphagia, and fluid deficits are common due to overall reduced intake.[1,2,3] Given the risk of malnutrition, individualized estimation of energy, protein, and fluid requirements is essential to optimize nutritional status. Estimated energy needs should be carefully considered and adjusted as needed based on weight trends.

Energy	25-35 g/kg/day
Protein	1.2-1.5 g/kg/day
Fluid	Must be carefully monitored due to increased risk of dehydration and altered thirst mechanisms in advanced dementia[2]

Case Report

Case Summary

Patient is an 81-year-old female admitted for treatment of dysphagia, UTI, malnutrition and acute respiratory failure with hypoxia

- Past medical history: Dementia, bipolar disorder, schizophrenia, HTN, anxiety disorder, cervicalgia, depression, fibromyalgia, malnutrition
- Dysphagia diagnostic criteria: Fiberoptic endoscopic evaluation of swallowing (FEES), a procedure used to assess swallowing function

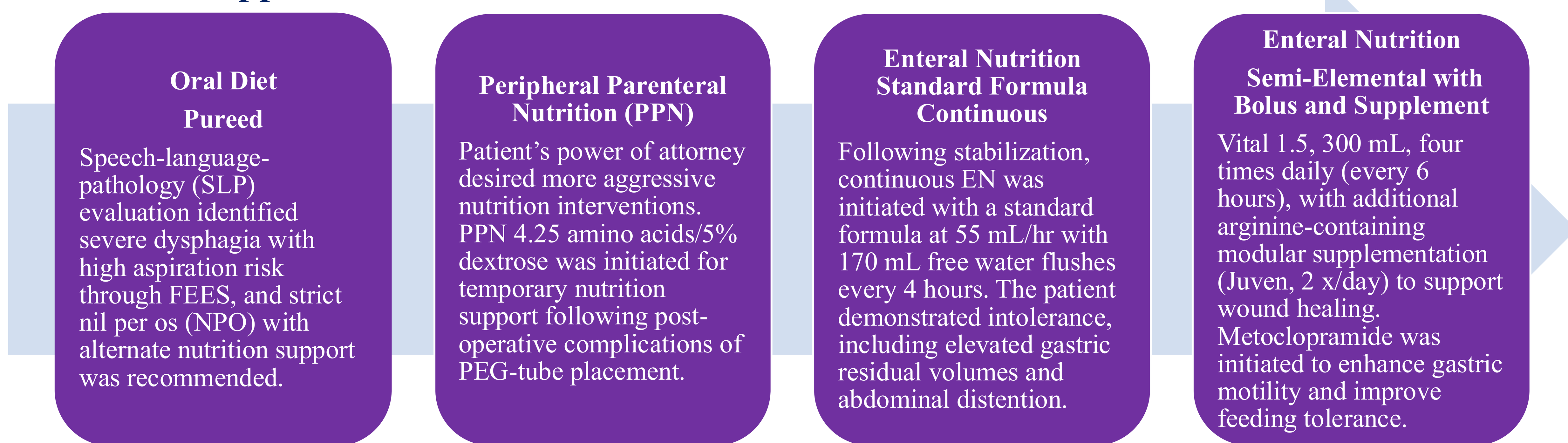
Assessment

- Height: 5'6 | BMI: 24.3
- Admit Weight: 68.2 kg (150 lb.)
- Weight Changes: 9% weight loss within the past 1.5 months
- Physical Assessment: Severe muscle wasting in lower extremities, biceps, & interosseous, mild subcutaneous fat loss in lower extremities

Nutrition Diagnosis

- Severe malnutrition related to decreased/poor appetite, inadequate oral intake, and chronic disease related to <25% intake, severe muscle loss, 7.5% or more weight loss within 1.5 months
- Altered GI function related to dysphagia as evidenced by FEES results, NPO, and need for alternate route of nutrition to meet >80% of estimated energy and protein needs.

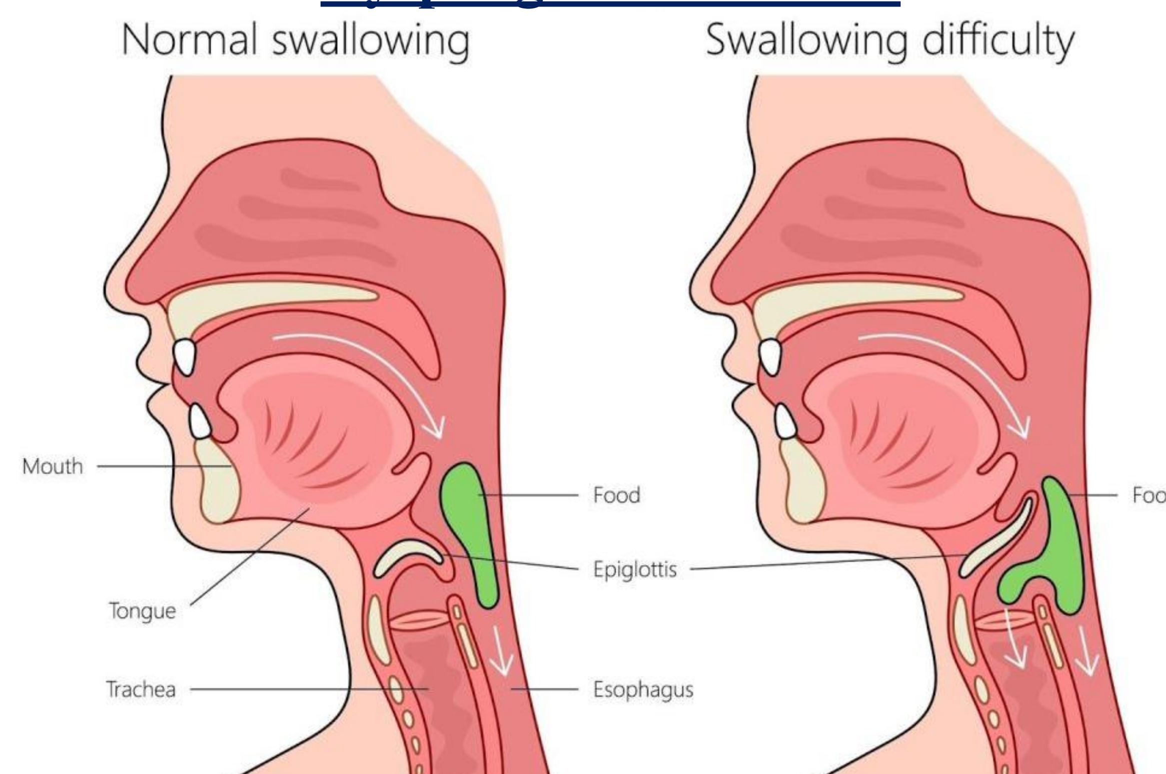
Nutrition Support Intervention



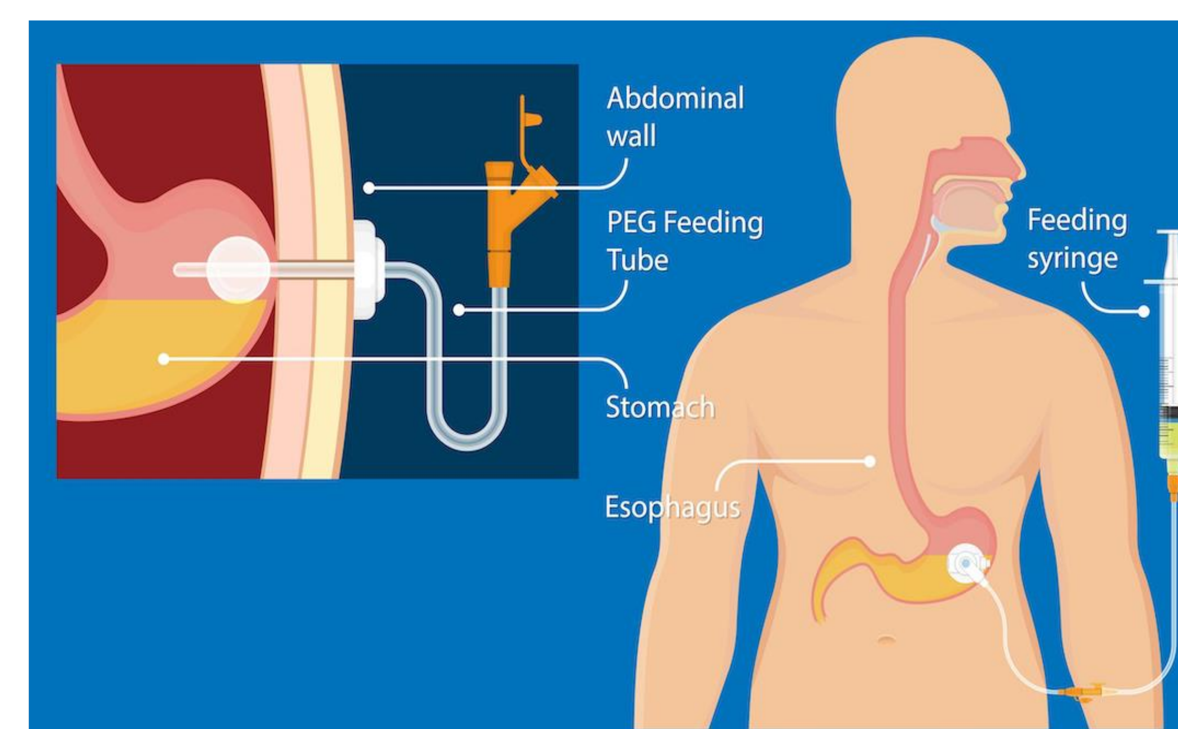
Outcomes

- Adjustment to semi-elemental formula and implementation of motility support, EN tolerance improved, with resolution of elevated gastric residual volumes.
- The patient consistently met 100% of estimated[4] energy and protein needs and was medically stabilized for discharge to[5] a long-term care facility with continued PEG-tube nutrition support.

Dysphagia Mechanism



PEG for EN Administration



Discussion and Application

Long-term feeding decisions are challenging, complex, and must be guided by prognosis, goals of care, and ethical considerations. Challenges arise for families and providers especially at the end of life. In advanced dementia "comfort-focused feeding" or "quality of life feeding" may be considered as an alternative or complementary approach to full enteral dependence.[3] PEG placement may provide nutritional and hydration support while still allowing limited oral intake when aligned with patient-centered goals. This case underscores the importance of interdisciplinary collaboration in managing complex enteral nutrition regimens. Ongoing communication among registered dietitians, nurses, physicians, and speech-language pathologists was crucial for monitoring feeding tolerance, adjusting formulas, and initiating use of prokinetic medications when indicated. Early recognition of enteral intolerance and timely modification of the feeding regimen were essential in optimizing tolerance meeting estimated nutrient needs.

Conclusions

In many cases, advanced dementia combined with severe dysphagia yields a poor long-term prognosis, hence initiating goals-of-care conversations early is crucial. Multiple barriers unique to each patient require strong coordination with registered dietitians, speech-language pathologists, medical doctors, and registered nurses to minimize feeding interruptions and improve overall patient outcomes.

References

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