Nutrition in Dysphagia: comparison between fiberoptic endoscopic evaluation of swallowing (FEES) and clinical examination

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Fiberoptic endoscopic examination of swallowing (FEES) is used as functional evaluation of the pharyngeal stage of swallowing and was first reported by Langmore, Schatz and Olson (1988). FEES is aimed to identify normal and abnormal anatomy and physiology of the swallow and to evaluate the risk of aspiration and the effectiveness of postures, swallow maneuvers, bolus modifications and sensory enhancements in improving swallowing safety and efficiency. The examination leads to recommendations regarding the optimum delivery and maintenance of nutrition and hydration (e.g. per oral, non-oral or combination of the two, special preparation of food).

In a centre for geriatric early rehabilitation (Ev. Geriatriezentrum Berlin) a retrospective study was undertaken to investigate if there are differences between FEES and clinical examination in determining adequate nutrition and diet modifications.

Patients with dysphagia were examined clinically by speech-language therapists to assess swallowing function. All patients with pharyngeal disorders of swallowing received also FEES. The oral intake was evaluated using the Functional Oral Intake Scale (FOIS) (Crary et al., 2004) as repeated measurement (clinical examination and FEES). Furthermore the Penetration-Aspiration-Scale (PAS) (Rosenbek et al., 1988) was used to evaluate the risk of aspiration (only with FEES). Preliminary analysis (N=19) shows no significant differences in feeding status but the mean-score of FOIS tends to be higher after FEES. Furthermore there is a high significant negative correlation between FOIS and PAS (r=-.75, p< .001). These preliminary findings suggest that FEES is a useful aid to evaluate the swallowing safety and to specify nutritional recommendations for patients with dysphagia.

