Establishment of a comprehensive hearing center (CHC)

Rudolf Hagen
University Clinic of Würzburg, Germany

Severely hearing impaired people have intense problems especially when arriving in a public medical center, which must be considered with great prudence. Besides a proper arrangement of spatial arrays and organisational processes, there is a wide spectrum of interdisciplinary diagnostics, therapeutic approaches, rehabilitation offers and long term after care, which has to be included within a comprehensive center. The Wuerburg CHC was established in 2009 and gradually linked to all necessary partners including physicians, audiologists, psychologists, genetisists, radiologists as well as care attendants, medical engineers and health care professionals. Now the CHC offers the complete spectrum starting with newborn hearing screening, early hearing aid fitting and genetic counselling, including all kind of otosurgical procedures like classical middle ear surgery, cochlea and other hearing implants or acoustic neurinoma surgery and finally the necessary rehabilitation programs. Regular board meetings for difficult cases, new technological developments as well the integration of research programs enable a continuous adjustment to the rapidly developing field of hearing restoration. Patients feed back demonstrated, that the decoupling of the center from the general duty of a large university ENT clinic, succeeded in a better quality of patient care for hearing impaired people.

Hagen_R@ukw.de

Oral intake of tablets and capsules in patients with dysphagia: Naming the risks

Heike Penner1 and Julia Schiele2
1Agaplesion Bethanien Krankenhaus, Germany
2University of Heidelberg, Germany

Lodging of tablets or capsules in the pharynx or their aspiration may result in reduced absorption, mucosal ulcerations, aspiration pneumonia or even suffocation. To facilitate swallowing, tablets are frequently split or crushed and capsules are opened which can impair efficacy and safety of drug treatment. Although it can be expected that swallowing solid medication is especially difficult for patients suffering from dysphagia, this issue has not been investigated thoroughly before. Therefore we investigated the prevalence of difficulties swallowing solid dosage forms in patients with stroke-induced dysphagia, whether the risk of aspiration for the accompanying bolus increases during oral intake of solid medication, whether routinely performed assessment tests help identify patients at risk and the prevalence of inappropriate manipulation of solid dosage forms. Using video endoscopy, we evaluated how 52 patients swallowed four placebos of different shapes with texture-modified water (TMW, pudding consistency) and milk. Lodging of placebos was observed and swallowing performance was rated according to the Penetration Aspiration Scale (PAS). Additionally, the Daniels Test, the Bogenhausen Dysphagie score, the Scandinavian Stroke Scale, the Barthel Index and Tinetti's Mobility Test were conducted. Finally, the patients' medication was checked for inappropriate modification. A substantial proportion of the patients (>40%), experienced severe difficulties swallowing solid oral dosage forms. Compared to the administration of TMW/milk alone, the placebos increased the PAS values for the accompanying bolus in the majority of the patients (p = 0.0001) and residue values were significantly higher (p = 0.05) as well. There was no correlation to any of the routinely performed bedside tests. Of the drugs that were modified before video-endoscopic evaluation 20.8% were crushed inappropriately. As a consequence we suggest that safety and effectiveness of swallowing tablets and capsules should be evaluated routinely in video-endoscopic examinations.

hpenner@bethanien-heidelberg.de