

# Dysphagia and Disease Related Malnutrition in Head and Neck Cancer Patients

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## Description of the initiative

- **Background:** Disease related malnutrition (DRM) and dysphagia (DYS) are prevalent and underrecognized conditions in hospitalized patients. Both are associated with poor prognosis and thus lead to increased morbidity and mortality. A negative synergistic effect between these entities may exist. Associations between DYS and DRM are not fully understood yet.
- **Rationale for the initiative:** Flexible endoscopic evaluation of swallowing (FEES) is seen as gold standard for assessment of swallowing and thus diagnosis of DYS. Broad applicable screening-tools and criteria for diagnosis of DRM (Nutritional Risk Screening 2002 (NRS), Global Leadership Initiative on Malnutrition (GLIM)) are established and well studied. Individual nutritional support should be early and routinely integrated in the professional management of patients with DYS.
- **Objectives and scope:** We aim to prospectively screen and assess patients with head and neck cancer (HNC) undergoing FEES (~150 p.a.) performed by specialized otorhinolaryngologists (ORL) at our tertiary hospital regarding their DRM risk and nutritional status (NRS, GLIM) at the time of FEES over the course of 12 months (mo) and identify potential risk factors related to morbidity and mortality. For concomitant assessment of reduced muscle mass and functional status, bioelectrical impedance analysis (BIA) and handgrip strength (HGS) will be used. Further, we will design and implement a medical pathway comprising multidisciplinary DYS and DRM diagnosis and treatment.

## Planned activities & deliverables

- Mo 1-3: conceptualization, design of integrated medical pathway, ethics committee approval, incorporation of malnutrition screening and assessment into the software used for FEES, acquisition of required materials. Mo 4-6: training of involved healthcare professionals (ORLs, speech and language therapists (SLT), dietitians). Mo 7-18: execution of study protocol. Mo 19-24: Data analysis and writing of report. Mo 24ff scientific publication.
- We will design and implement a state-of-the-art medical pathway comprising DYS and DRM diagnosis as well as multidisciplinary treatment at a tertiary university hospital. Further, we will identify a subgroup of HNC patients with DRM in the cohort of DYS patients and thus we will be able to describe certain risk factors related to HNC patients with DYS and DRM.

## Resources & enablers

- Funding via the MNI-grant will contribute to the acquisition of devices (BIA EUR 5.500,- and dynamometer EUR 500,-). The remaining amount of EUR 24.000,- will contribute to personnel costs (dietitians/speech and language therapists/projectmanagement) needed to guarantee the success of this project. The commitment of a experienced, highly skilled and professional team of ORLs, SLTs and dietitians, dedicated to improve management and safety of patients with DYS and DRM will significantly contribute to the success of this project at our tertiary hospital.

## Results/outcomes & expected impact

### • How will the findings be implemented?

After the project phase of 24mo we will maintain the developed medical pathway for patients with HNC in routine care and further aim to transfer it to other patient groups affected by DYS and DRM.

### • How will this project advance patient care / contribute to optimal nutritional care?

Due to early and simultaneous identification and thus increased efficacy in the treatment of patients with DYS and DRM.

### • What makes the project innovative?

The multidisciplinary and combined approach for diagnosis and therapy of DRM and DYS with due regard to all attending health care professionals.

### • Will the project be likely to influence national nutrition policy?

With the support of the Austrian Society for Clinical Nutrition a national platform for dissemination of our results will be granted.

### • Is the project transferable to other settings / countries?

The integrated medical pathway comprising multidisciplinary DYS and DRM diagnosis will be designed to be easily transferred to other settings and countries.



**Please tick to confirm the PEN letter of endorsement is attached.  
Incomplete submissions will not be considered.**