### Kurzfassung

This lecture will review the normal anatomy and variant of the paranasal sinuses with emphasis on paranasal sinus diseases and their diagnosis using different imaging techniques.

After a short introduction about the more inexpensive plain-film radiographs of the paranasal sinuses, we present the more expensive MDCT and CBCT imaging which can contribute significantly to delineating the extent of paranasal sinus congenital disease, inflammation or tumoral development. Nevertheless we show that MR imaging is essential to assess the neoplasm development or infiltration in to the paranasal sinus, the tumoral perineural extension to the skull base and the differentiation of retained fluid secretions from soft tissue masses in the sinuses. We will present different cases to illustrate aspects of paranasal sinus development, congenital disease, inflammatory disease, tumors and tumor-like conditions, malignant tumors and expansile odontogenic conditions.

### Lernziele

- To be able to recognize the normal structure of the osteomeatal unit, maxillary ostium and variant of the paranasal sinuses.
- To be able to choose the best imaging techniques for the most common paranasal sinus lesions.
- To be able to choose the best cross section imaging to delineate the extent of paranasal sinus disease.
- To recognise the imaging features of the intrinsec diseases of the paranasal sinuses.
- To recognise the imaging features of the extrinsec diseasees involving the paranasal sinuses.
Kurzfassung: The TNM System for the classification of malignant tumors describes the anatomical extent of disease at the level of the primary tumor (T) and lymph nodes (N) and the absence or presence of distant metastases (M). As the anatomical extent of disease is a very powerful prognostic indicator for survival, cancer staging is an essential tool to make a judgment about prognosis and to decide on the most effective way of treatment.

In this lecture staging of hypopharyngeal and laryngeal tumors according the UICC (Union for International Cancer Control), 8th edition, will be reviewed. Normal anatomy of the hypopharynx and larynx will be demonstrated, including anatomical subsites relevant for staging. The assessment of different T-stages will be discussed and richly illustrated with patient cases. The addition to the N-staging in the 2016 eighth edition (N3a, N3b) in comparison to the 2009 seventh edition (N3) will be highlighted.

Lernziele: - to review normal anatomy of the larynx and hypopharynx
- to become familiar with T(umor)-staging of hypopharyngeal, supraglottic, glottic and subglottic carcinomas