

## **Neck dissections: A practical guide for the reporting pathologist**

Dr Julia Woolgar, Dr Asterios Triantafyllou; University of Liverpool.

Firstly, the clinical nomenclature and classifications of neck dissections (1) that may be used on pathology request forms and at multidisciplinary team meetings will be outlined. This will be followed by an overview of specimen presentation, macroscopic assessment, and the harvesting, trimming and processing of individual lymph nodes (1-3). The histological assessment of lymph nodes will be detailed in relation to current pathological TNM staging criteria (4). Isolated tumour cells, micrometastasis, conventional and occult metastasis will be defined, with explanation of the terms “skipping”, “peppering” and “fast-tracking”. The definition and stages of extracapsular spread (inchoate through to established involvement of perinodal fat and perinodal structures) will be discussed with suggestions on standardised measurement and recording.

Potential inaccuracies and pitfalls directly related to the pathologist will be considered in three categories: sampling, oversight, and misinterpretation (1-3, 5). In the misinterpretation category, reactive lesions *versus* metastasis, benign cellular inclusions, cystic metastasis *versus* branchial cyst, salvage neck dissections and multiple pathologies will be considered.

Throughout the presentation, emphasis will be given to practical aspects with suggestions for optimising the accuracy of the detailed histopathological staging of neck dissections within the setting of a routine histopathological diagnostic service.

References:

- 1 Woolgar JA, Triantafyllou A. Neck dissections: A practical guide for the reporting histopathologist. *Current Diagnostic Pathology*, 2007, 13: 499-511.
- 2 Helliwell TR, Woolgar JA. *Minimum dataset for histopathological reporting of common cancers: minimum dataset for head and neck carcinomas and salivary neoplasms*. London, UK: The Royal College of Pathologists, 2005.
- 3 Woolgar JA, Triantafyllou A. Lymph node metastases in head and neck malignancies: assessment in practice and prognostic importance. *Diagnostic Histopathology*, 2010, 16: 265-275.
- 4 Sobin LH, Gospodarowicz MK, Wittekind C. *TNM Classification of Malignant Tumours*, 7<sup>th</sup> edition. Wiley Blackwell, 2009.
- 5 Woolgar JA, Triantafyllou A. Pitfalls and procedures in the histopathological diagnosis of oral and oropharyngeal squamous cell carcinoma and a review of the role of pathology in prognosis. *Oral Oncology*, 2009, 45: 361-385.