Background: CD5 is an antigen normally expressed on T-cells but can also be expressed in a small subset of B-cells and some non-Hodgkin B-cell lymphoproliferative disorders such as small lymphocytic lymphoma, marginal zone lymphoma and mantle cell lymphoma. When using a single immunohistochemical stain for each antigen on separate slides, it can be challenging to compare and correlate whether CD5 positivity is being seen in neoplastic B-cells or normal T-cells. This problem is amplified when the CD5 expressing B-cells are present in small numbers, such as in a bone marrow trephine.

Aim: In addition to the usual panel of immunohistochemical stains, we describe the application of two T-cell markers in a combined stain, CD5 (red, cytoplasmic) / CD3 (brown, cytoplasmic), to aid in the identification of CD5 co-expressing B-cells in small B-cell lymphoproliferative disorders.

Method: In a suspected small B-cell lymphoproliferative disorder, the red CD5 immunohistochemical stain is applied first and is positive in all normal T-cells and CD5-expressing B-cells. The brown CD3 stain is applied second, and also stains all the normal T-cells that express both CD3 and CD5, but does not stain any of the B-cells. As the darker brown stain is applied over the red, all CD3 and CD5 expressing T-cells that have been stained twice only appear brown, whereas the CD5 expressing B-cells appear red.

Conclusion: Following the application of these two T-cell markers to a single slide, it can be deduced that all brown staining cells are normal CD3 / CD5 expressing T-cells whereas the red staining cells are CD5-expressing B-cells.

55. NEOPLASIA IN GASTRIC ADENOCARCINOMA AND PROXIMAL POLYPOSIS SYNDROME (GAPPS): GASTRIC RATHER THAN INTESTINAL PHENOTYPE

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Background: Gastric adenocarcinoma and proximal polyposis of the stomach (GAPPS) was reported in 2011 as a new autosomal dominant gastric polyposis syndrome. It is characterised by exclusive involvement of the gastric body and fundus with sparing of the antrum by multiple, often 'carpet-like', polyps. These polyps have a morphologic spectrum that includes early microscopic lesions, 'fundic gland polyp' like lesions, dysplastic polyps and rare carcinomas. The neoplastic nature and progression have not been well characterised.

Aims: This study aims at a systematic and detailed morphological description of lesions in a cohort of GAPPS family members.

Design: Gastric biopsies and gastrectomies of 20 patients belonging to a previously defined GAPPS family were identified and their lesions were morphologically analysed in detail by 2 authors (BB,PK). When material was available, stains for MUC2, MUC5AC, MUC6, CDX2, Ki-67 and p53 were performed. Neoplastic lesions were categorised as low or high grade dysplasia, intestinal or gastric phenotype and invasive carcinoma.

Results: Dysplasia was identified in eight patients, either as a focal change within a non-adenomatous polyp (3) or as a gastric adenoma (3) or as both (2). All dysplastic lesions were gastric phenotype. Four were low grade and 4 were high grade

dysplasia. One patient had carcinoma at presentation that was WHO tubular morphology and gastric phenotype. It was accompanied by fragments of dysplastic mucosa also of gastric phenotype showing 2 architectural patterns.

The spectrum of neoplastic lesions in GAPPS appears to be restricted to gastric phenotype irrespective of the type of lesions.

Conclusions: The spectrum of gastric pathology associated with GAPPS is wider than previously reported and include newly identified hyper-proliferative aberrant pits, PFH, predominantly gastric and/or hybrid dysplasia through to WHO tubular type adenocarcinoma.

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56. THE ROLE OF FINE NEEDLE ASPIRATION CYTOLOGY IN THE ASSESSMENT OF LYMPHADENOPATHY

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Background: Fine needle aspiration cytology (FNAC) of lymph nodes is a simple, cost effective, out-patient procedure used for diagnosis of various cases of lymphadenopathies.

Aim: To evaluate the accuracy, sensitivity and specificity of the FNA-C as screening tool of lymphadenopathy.

Methods: FNA cytology archives of lymphadenopathies between January 2011 and December 2013 at Pathology Department Dr. Soetomo hospital was retrieved. Cytological and histological diagnostic were compared to estimate the accuracy of FNA-C. One hundred and eighteen cases were analyzed.

Result: The accuracy of FNA-C was 90.68 %, sensitivity was 89.52% and specificity was 100%. Positive predictive value was 100%, and negative predictive value was 54.17%.

Conclusion: Cytological examination for lymphadenopathy by FNA-C is a high reliable tool, particularly in order to identify malignancy. However, for detailed subtyping of certain disease entities such as malignant lymphoma, surgical biopsy for histologic and immunohistochemical studies are required.

57. CRIBRIFORM-MORULAR VARIANT OF PAPILLARY THYROID CARCINOMA: A STUDY OF THREE CASES FEATURING THE PIK3CA MUTATION

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