PARATHYROID MORPHOLOGY AND MENIN STAINING IN MULTIPLE ENDOCRINE NEOPLASIA TYPE 1 (MEN 1)

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Aim: Patients with MEN 1 have a mutation in the *menin* gene and develop hyperplasia and tumours of parathyroid, pituitary and pancreatic glands. We describe the morphology and corresponding *menin* expression of parathyroid tissue in patients with MEN 1 harbouring a common splice site gene mutation.

Methods: Parathyroid tissue from eighteen MEN 1 patients, five patients with sporadic primary hyperparathyroidism (PHPT) and one normal parathyroid was obtained. *Menin* staining was graded and morphology described on all samples by LP under the supervision of HKM. Tissue was derived from archival blocks.

Results: Variable histological characteristics were observed. Patients with MEN 1 had significant oxyphil cell content, whereas only 1 of the 5 PHPT samples had oxyphil cells identified.

Menin IHC of normal parathyroid and sporadic primary hyperparathyroidism showed homogenous strong expression in both nuclear and cellular compartments. MEN 1 patients showed variable *menin* expression, from no staining to intense staining. Some oxyphil cells showed intense granular cytoplasmic staining with no nuclear staining.

Discussion: Variable *menin* expression was observed in MEN 1, despite a common genotype, suggesting post-translational or other factors may influence *menin* protein expression in disease. Oxyphil cells were prominent in MEN 1 tissues and displayed a granular cytoplasmic *menin* accumulation in some cases.

HEPATIC MYELOID SARCOMA DIAGNOSED AT AUTOPSY: A CASE REPORT

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Myeloid sarcoma is a rare malignancy characterised by a proliferation of myeloid blasts that effaces native tissue and forms a mass. It may occur at a range of sites, with or without associated leukaemia. In the instances where leukaemia is absent or not suspected it is often a diagnosis reached with some difficulty. We present a case of myeloid sarcoma involving the liver and perigastric lymph nodes, diagnosed at autopsy following an acute fulminant illness in a previously well 63-year-old male. Issues that can render the diagnosis of myeloid sarcoma difficult are briefly discussed.

DUAL DIAGNOSIS OF GASTROINTESTINAL STROMAL TUMOUR AND PAPILLARY RENAL CELL CARCINOMA BY UPPER GASTROINTESTINAL ENDOSCOPIC ULTRASOUND-GUIDED FINE-NEEDLE ASPIRATION BIOPSY: A CASE REPORT

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Diagnosis of two neoplasms by a single fine-needle aspiration biopsy (FNA) is a rare phenomenon and may represent sampling of two separate tumour masses, a collision tumour, or tumour-to-tumour metastasis. We present a case of dual diagnosis of papillary renal cell carcinoma (RCC) and gastrointestinal stromal tumour (GIST) by upper gastrointestinal endoscopic ultrasound (EUS)-guided FNA in an 83-year-old female with multiple intra-abdominal masses. Aside from the rarity of dual diagnosis by the one procedure, the coexistence of these two neoplasms raises the possibility of shared pathogenetic mechanisms and issues of surveillance and therapy.

INTRAVASCULAR LARGE B-CELL LYMPHOMA DIAGNOSED AT AUTOPSY: A CASE REPORT

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Intravascular large B-cell lymphoma (IVLBCL) is a rare form of large B-cell lymphoma in which the lymphoma cells are predominantly or exclusively found within the lumens of vessels, mainly capillaries. The clinical presentation is notoriously variable as vessels of essentially any anatomical site may be involved. We present a case of IVLBCL diagnosed at autopsy in a 71-year-old female following non-specific subacute pre-hospital symptoms and rapid hospital inpatient deterioration. Features of IVLBCL and the possible role of diagnostic skin biopsy in cases where IVLBCL is suspected are briefly discussed.

A QUANTITATIVE METHOD FOR DEVELOPING CRITICAL VALUES IN ANATOMIC PATHOLOGY

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Background: 'Critical values' in anatomic pathology, values necessitating timely contact with the treating clinician to prevent morbidity and mortality, are not uncommon occurrences. Despite this, reporting and definitions of 'critical values' are highly variable.¹ In addition the implementation of proposed guidelines² have significant inconsistencies when applied clinically.³

Aims: To develop an evidence-based semi-quantifiable decision making tool for developing 'critical values' in anatomical pathology. Allowing greater consensus on reporting 'critical values' when applied routinely.

Method: Use of a multistage algorithm allowing for the transmutation of qualitative and quantitative variables into numeric representations. Higher scores representing values likely to be 'critical'. Several prototypical 'critical values' are analysed using this tool, with validity tested by comparing produced values against current consensus established within medical literature.

Results: A multitude of 'critical values' displayed a positive correlation between quantified scores and current consensus data across medical literature. For instance giant cell arteritis and adipose tissue in endometrial curetting's score lowly and highly respectively using our algorithm. The general consensus in