female who presented with Doege-Potter syndrome. This case highlights the unusual presentation and location, atypical CD34 expression and utility of STAT6 immunohistochemistry for SFTs.

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HUNGRY FOR KNOWLEDGE: EXPLORING PATHOLOGY ALIMENTARY ANALOGIES THROUGH CULINARY CREATIONS

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Objectives: To explore alimentary analogies in pathology through culinary creations and discuss their implications for pathologists and trainees.

Background: Alimentary analogies abound in the history and current practice of pathology, being a valuable tool in the diagnostic process. They can serve as a useful learning tool to recognise and remember pathological patterns and disease entities.^{1,2} They are an effective way of communicating pathological findings, by adding flavour to macroscopic and microscopic descriptions.

Method: A literature search was performed for commonly used alimentary analogies in pathology. Recipes for 'sago spleen' (amyloidosis), ovarian 'chocolate cyst' (endometriotic cyst) and 'anchovy paste' (amoebic abscess) liver and placenta (derived from Greek, meaning 'flat cake') were created.

Results: A literature search yielded 96 medical alimentary analogies.^{1–3} Culinary creations resembling pathology specimens, based on selected alimentary analogies were successfully produced, sampled, consumed and digested by staff at our institution.

Conclusions: Alimentary analogies in pathology can be further explored through culinary creations, which not only serve to satisfy the pathologist's hunger for knowledge, but also as a valuable learning and communication tool in the diagnostic process.

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A CASE OF SPONTANEOUS INTESTINAL PERFORATION ASSOCIATED WITH CANDIDIASIS IN A PREMATURE INFANT

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Intestinal perforation is a potentially life-threatening complication of pre-term birth. Focal or spontaneous intestinal perforation (SIP) is a type of intestinal perforation occurring in extreme prematurity which is less common than, and is reported to demonstrate some clinically and histologically distinct features from, necrotising enterocolitis (NEC). This case report describes a case of SIP of the small bowel associated with candidiasis in an extremely premature infant girl. Histologically, the bowel wall lacked the extensive coagulative necrosis typically seen in NEC; rather, the adjacent bowel showed some possible attenuation of the muscularis propria and a serosal fibrinoinflammatory exudate, with the mucosa and remainder of the bowel wall otherwise well preserved. Fungal spores and scattered pseudophyphael elements within the serosal exudate and, very focally, within the outer half of the muscularis propria were only identified histologically after performance of special stains on the resection specimen. An association between SIP and candidial sepsis has previously been reported in the literature and this case highlights that identification of such cases can be aided by performing special stains on cases with clinical and/or histological features in keeping with SIP.

OVARIAN DLBCL PRESENTING AS A VERY LARGE OVARIAN MASS IN A YOUNG WOMAN – A CASE REPORT (AND POTENTIAL FROZEN SECTION PITFALL)

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While ovarian involvement as a late manifestation of disseminated non-Hodgkin lymphoma (NHL) is not uncommon, primary ovarian NHL, or NHL presenting for the first time as an ovarian mass, is rare, having a reported incidence of around 0.5% of all untreated NHL and 1.5% of untreated ovarian neoplasms. This case study reports a 27-year-old woman who underwent a unilateral salpingo-oophorectomy and staging for a very large, rapidly enlarging, right ovarian mass, suspected clinically of being a dysgerminoma. On frozen section, the tumour was favoured to be a germ cell tumour, with juvenile granulosa cell tumour also not excluded. On permanent section, however, the tumour more clearly demonstrated morphological features and immunological features in keeping with a large B-cell non-Hodgkin lymphoma. Coupled with FISH analysis showing no evidence of a MYC gene rearrangement, a diagnosis of DLBCL, NOS, double expressor phenotype, was ultimately made. This case serves as a reminder that, although rare as an initial presentation in the ovary, lymphoma should be considered by

pathologists in the differential diagnosis of ovarian tumours, including at frozen section, where consideration should also be given to obtaining fresh tissue for flow cytometry.

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GLANDULAR ODONTOGENIC CYST WITH HARD PALATE PERFORATION – A CASE AND REVIEW OF LITERATURE

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Glandular odontogenic cyst (GOC) is a rare developmental cyst of odontogenic origin involving the jaw. GOCs can display locally aggressive behaviour and recurrence after excision, requiring close follow-up.

We report an 82-year-old Asian male who presented with an incidental maxillary cyst, discovered during computed tomography (CT) scan of the brain for a mechanical fall. The CT scan and plain X-ray films demonstrated a unilocular expansile cystic lesion involving left side of the maxillary sinus.

Enucleation was performed, with the intraoperative findings of a lesion containing a resorbed tooth with perforated hard palate.

On gross examination, the specimen measured 2.5×1.3×1.0 cm and consisted of a cystic cavity surrounded by a fibrous wall. Histological examination demonstrated thick cyst wall lined by ciliated epithelium with areas of cellular tufting, stratification, and eosinophilic cells with apocrine snouting and hobnailing. Occasional mucous cells and duct like structures were seen. Focal subtle thickening of epithelium was also present. No high grade atypia or overt invasive features were identified. Fluorescence *in situ* hybridisation to detect MAML2 gene rearrangement was negative.

The overall clinical presentation as well as morphology of the cyst were most consistent with a diagnosis of glandular odontogenic cyst.

A RARE PAEDIATRIC RENAL TUMOUR, CLEAR CELL SARCOMA OF KIDNEY

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Clear cell sarcoma of kidney is a rare paediatric malignant renal neoplasm which affects children in the 2nd and 3rd year of life. It has a propensity to metastasize to bones, lungs and brain and has a tendency to recur after treatment. The renal biopsy showed classic pattern of clear cell sarcoma of kidney confirmed with immunohistochemical markers and the subsequent post neoadjuvant nephrectomy showed predominantly myxoid pattern possibly due to treatment effects. Since the tumour mimics other paediatric malignant neoplasms with small round blue cell morphology, immunohistochemical markers play a prime role in differentiating them for effective treatment with doxorubicin. Due to aggressive nature and poor prognostic features of clear cell sarcoma of the kidney, it is

important to diagnose this tumour and exclude the common neoplasms occurring at this age group prior to neoadjuvant treatment.

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SOLID TUMOURS WITH NTRK FUSION: CORRELATION ACROSS PAN-TRK IHC AND MOLECULAR ASSAYS

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Background: Solid tumours with NTRK fusions are rare tumours. However, their excellent response to NTRK inhibitors necessitate that these tumours are accurately diagnosed so that patients can benefit from targeted therapy.

Methods: We searched our archives for NTRK fusion positive tumours to study their clinico-pathological features and assess the performance of pan-TRK immunohistochemical (IHC)(EPR17341, Ventana) staining, RNA based next generation sequencing (NGS) assays (OncoPrint Comprehensive Assay v3. Fusion and ArcherDx FusionPlex) and a real-time PCR assay (AmoyDx) in diagnosing these tumours. NTRK1 FISH was also performed on 5 cases.

Results: 11 cases were found with TPM3-NTRK1, LMNA-NTRK1, SQSTM1-NTRK3, EML4-NTRK3, ETV6-NTRK3 fusion and 1 case with uncharacterised NTRK1-partner (cases include 1 lung poorly differentiated carcinoma, 1 thyroid anaplastic carcinoma, 1 breast secretory carcinoma, 1 parotid secretory carcinoma, 2 colon poorly differentiated/adenocarcinoma and 6 spindle cell sarcomas). Pan-TRK IHC on 11 cases showed 100% sensitivity for NTRK1 fusions (5/5) and 66.7% sensitivity for NTRK3 fusions (4/6). Both RNA based NGS assays showed 100% sensitivity, the real-time PCR had 90% sensitivity (9/10) and NTRK1 FISH had 40% sensitivity (2/5).

Conclusion: Pan-TRK IHC may play a role in screening for NTRK fusions. RNA NGS assays appear to be superior to real-time PCR and FISH.

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