on diagnosis of medullary carcinoma of thyroid (MCT). A total of 22 cases of MCT were diagnosed during a period of 5 years from September 2013 to August 2018, on histopathology. Fine needle aspiration cytology (FNAC) was performed in 8 of these cases. However, a second search on LIS revealed 2 more cases under the FNA section, without subsequent biopsies.

Results and conclusions: Of the 10 FNA cases, 6 were diagnosed accurately; 4 cases had discordance with diagnosis of colloid adenomatous goiter in 2, a case each of involutonal nodule and Hurthle cell neoplasm. All the slides were reviewed along with gross findings of resection specimens wherever available. One case was recategorised as MCT on review. The cause of false negativity in the other 3 included paucicellularity and presence of an adjacent larger involutonal nodule with a smaller hidden focus of MCT. One case of oncocytoid variant of MCT was misinterpreted as Hurthle cell neoplasm on FNA.

In conclusion, FNAC is a useful and accurate non-invasive method that can be used for diagnosis of MCT. With classical cytological features of plasmacytoid to spindle cells, dispersed chromatin, binucleation and presentation of amorphous material in the background, diagnosis can be made with accuracy. The pitfalls include sampling error, misinterpretation in cases with microfollicular pattern or oncocytic cells.

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18. CHRONIC NOROVIRUS INFECTION IN COMMON VARIABLE IMMUNE DEFICIENCY (CVID) – A CASE REPORT AND LITERATURE REVIEW

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Background: Norovirus, a member of the Calici viruses, is an unenveloped positive stranded RNA virus. Patients with immunodeficiency including common variable immune deficiency (CVID) have been reported to have an increased risk of chronic and severe norovirus infection.¹ Norovirus enteropathy may result in villous atrophy and malabsorption.

Aims: To present a case report and relevant literature review on common variable immune deficiency (CVID) enteropathy.

Methods: A 57-year-old female presented with diarrhoea and weight loss on a background of common variable immune deficiency (CVID). Endoscopy and colonoscopy revealed abnormal nodular duodenal mucosa. Gastric body, antral, duodenal and terminal ileum biopsies were performed and sent for histopathological examination in our department of pathology. The duodenal sample showed villous shortening and crypt hyperplasia, with increased intraepithelial lymphocytes and a mild increase in chronic inflammatory cells in the lamina propria. There was an absence of plasma cells and no Giardia or viral inclusions were noted.

Results and conclusions: The extent of inflammatory infiltrate within the lamina propria of the duodenum was less than expected for coeliac disease. In addition the absence of plasma cells

was in keeping with CVID. All duodenal biopsies demonstrated histological features of CVID enteropathy which has been linked to chronic norovirus infection. This case illustrates the potential for chronic norovirus infection in patients with CVID.^{1,2} Recognition of this condition is critical to the institution of appropriate therapy.

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19. THE MANY FACES OF COLONIC MALAKOPLAKIA: A CASE SERIES AND REVIEW OF THE LITERATURE

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Background: Malakoplakia is a rare inflammatory response to Gram-negative bacteria, involving intracellular deposition of iron and calcium. It is associated with immunosuppression, and occurs most often in the bladder. Although rare, the colon is the most common extra-genitourinary site.

Aims and methods: To identify cases of colonic malakoplakia, the Royal Prince Alfred Hospital histopathology data base was searched from 2009. A literature review was performed using PubMed with the term 'malakoplakia'. Formalin-fixed paraffin-embedded slides were stained with haematoxylin and eosin, PAS and von Kossa.

Results and conclusions: A 10-year case file review identified four cases of colonic malakoplakia. Ages ranged from 50–79 with 2 males and 2 females. Clinical presentation and endoscopic appearances varied widely with an incidental polyp, mucosal changes mimicking inflammatory bowel disease, and a pelvic mass lesion with overlying normal mucosa seen. In all cases the biopsies revealed numerous histiocytes and characteristic Michaelis-Gutmann bodies highlighted with PAS and von Kossa stains diagnostic of malakoplakia. A literature review identified 31 published case reports in adults and 10 in children of colonic malakoplakia. These cases highlight the protean manifestations of colonic malakoplakia. Consideration should be given to the diagnosis in histiocytic infiltrates in the large bowel to facilitate appropriate clinical management.

20. APPENDICECTOMY UNDER THE MICROSCOPE: AN AUDIT OF APPENDICECTOMIES AT ROYAL NORTH SHORE HOSPITAL IN 2017

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Background: Acute suppurative appendicitis is a common condition that requires surgical intervention. The incidence of acute