sections showed thyroid follicles and carcinoid tumour characterised by a rosette-forming uniform cells which were positive for neuroendocrine markers with a low Ki-67 proliferative index. Additional sections of tumour revealed nodules with classic architectural and nuclear features of PTC admixed with the strumal component. This case highlights the importance of careful examination and adequate sampling of ovarian teratomas for features of PTC especially in cases of struma ovarii or strumal carcinoid.

METASTATIC PARAGANGLIOMA AS A DIAGNOSIS FOR A CLEAR CELL-LIKE TUMOUR

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A paraganglioma is a potentially malignant neuroendocrine tumour with the cells derived from the embryonal neural crests. They can arise in the sympathetic paravertebral ganglia of the thorax, abdomen and pelvis as well as along the glossopharyngeal and vagal nerves in the neck and base of skull.¹ The specific incidence of paraganglioma is unknown as it is commonly described in conjunction with pheochromocytoma and together there are approximately 500–1600 cases in the United States per year.¹ Paragangliomas at different sites have been reported to have different rates of metastases, ranging from 2% (carotid and middle-ear type) to 16% (glomus vagale).² Overall metastatic paragangliomas and pheochromocytomas are rare, with an incidence of less than one per one million and with a long latency of up to 20 years.^{2,3} Subsequently metastatic paraganglioma is not commonly encountered in daily practice and can be a mimic of other pathologies. A case demonstrating this is presented and the diagnosis was inevitably made more difficult as the incorrect medical terminology was used.

References

1. Young WF Jr. UpToDate. Paragangliomas: Epidemiology, clinical presentation, diagnosis, and histology. Cited 17 Jun 2019.
2. Lloyd R, Osamura R, Klöppel G, *et al.*, editors. *WHO Classification of Tumours of Endocrine Organs*. 4th ed. Lyon: IARC, 2017.
3. Angelousi A, Kassi E, Zografos G, *et al.* Metastatic pheochromocytoma and paraganglioma. *Eur J Clin Invest* 2015; 45: 986–97.

LARGE VESSEL VASCULOPATHY ASSOCIATED WITH LUPUS ANTICOAGULANT: A CASE REPORT

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Background: Vasculopathy associated with lupus is a rare form of vascular involvement characterised by non-inflammatory vascular injury resulting in luminal narrowing. Vasculopathy in large vessels is uncommon and should be distinguished from vasculitis.¹

Case report: We report a case of 51-year-old woman with chronic ischemic stricture of the small intestine due to large vessel vasculopathy. She presented with abdominal pain and vomiting and had a history of stroke six months before. CT scan showed focally dilated prominently thickened small intestinal loops. She'd had thrombosis in left external and internal carotid

artery, and multiple emboli to liver, spleen, kidney and lung. Lupus anticoagulant and ANA (in speckled pattern) were positive. Histological examination from the strictured site revealed large areas of ulceration, inflammatory granulation tissue forming pseudomembrane and extensive pyloric metaplasia. The vascular changes were peculiar as the large vessels showed widespread intimal thickening with irregularly narrowed lumen. No thrombosis or vasculitis was seen.

Conclusion: Large vessel vasculopathy may occur in lupus and could be easily overlooked. It should be considered as a potential cause of ischemia in a patient with lupus when no obvious thrombosis is detected.

Reference

1. Waki D, Onishi A, Morinobu A. Large vessel vasculopathy in a patient with systemic lupus erythematosus: a case report. *J Med Case Rep* 2019; 13: 189.

IgG4 ASSOCIATED AUTOIMMUNE HEPATITIS: A RARE ENTITY

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Background: IgG4-related disease is an immune mediated multisystem disorder fibroinflammatory condition. Two types of hepatic involvement in IgG4 related disease have been described: IgG4 hepatopathy and IgG4 related autoimmune disease,¹ which is rare with only few cases reported.

Case report: We present a case of 50-year-old lady who presented with a history of malaise and nausea, and had deranged LFTs, raised IgG4 and serum lipase levels, and positive ANA and SMA antibodies. Abdominal CT showed no bile duct abnormality. Liver biopsy showed features of autoimmune hepatitis with grade III activity. Unusually, a significant amount of pericapsular tissue was present which showed fibroinflammatory reaction with infiltration of IgG4 bearing plasma cells. No significant bile duct damage was seen. The patient fulfilled the diagnostic criteria for definite AIH using IAIHG scoring system and responded well with steroid therapy.

Conclusion: The diagnostic criteria for IgG4 associated autoimmune hepatitis are not well defined and additional studies are needed to clarify the clinical significance and diagnostic guidelines.²

References

1. Umemura T, Zen Y, Hamano H, *et al.* Clinical significance of immunoglobulin G4-associated autoimmune hepatitis. *J Gastroenterol* 2011; 46 (Suppl 1): 48–55.
2. Chung H, Watanabe T, Kudo M, *et al.* Identification and characterization of IgG4-associated autoimmune hepatitis. *Liver Int* 2010; 30: 222–31.

LOW GRADE SEROUS CARCINOMA OF THE TESTIS: A CASE REPORT

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Ovarian-type epithelial tumours of the testis represent rare entities.¹ Due to their relative scarcity these tumours hold the