testosterone level of 5.74 nmol/L (NR: <1.67). Other blood investigations were normal. Further investigation for the hyperandrogenism from possible androgen-producing tumour was postponed till post-delivery. However, during the 6-month follow-up post-delivery, she had regularised menses and reduced facial hair, which minimised regular shaving. Her repeat testosterone level taken 4 months post-delivery was 0.49 nmol/L.

**CONCLUSION**

Elevated testosterone during pregnancy is a normal physiological response vital for maintaining pregnancy and initiation of parturition. It is caused by the increased production and reduced clearance of testosterone. Excess testosterone during pregnancy does not cause clinical hyperandrogenism as a result of increased SHBG, which binds the androgens, and placental aromatase, which converts excess testosterone to estradiol. However, PCOS can result in a diminished protective effect of the placenta aromatase, resulting in clinical hyperandrogenism during pregnancy. Our patient had a pre-pregnancy PCOS diagnosis, which worsened her hyperandrogenism intrapartum. This condition was similar to a few published case reports. The resolution of PCOS symptoms post-delivery can transiently happen due to the stabilisation of hormones postpartum; unfortunately, PCOS symptoms may recur later on.

## EP_A061

### WHEN THE THYROID AND STOMACH COLLIDE: APS TYPE 3B BEHIND CARDIAC SYMPTOMS

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**INTRODUCTION/BACKGROUND**

Autoimmune Polyglandular Syndromes (APS) are a group of disorders characterised by the simultaneous or sequential occurrence of multiple autoimmune-mediated diseases affecting endocrine glands. Pernicious anaemia is commonly part of this broader spectrum of autoimmune conditions.

**CASE**

We report the case of a 65-year-old male with a seven-year history of megaloblastic anaemia treated with cyanocobalamin, who presented with severe anaemia-induced non-ST-elevation myocardial infarction (NSTEMI) that manifested as chest pain, reduced exercise tolerance and profound fatigue. Initial investigations revealed pancytopenia, with a haemoglobin level of 5.0 g/dL, elevated mean corpuscular volume (142.2 fL), platelet count of 26 × $10^9$/L, white cell count of 0.9 × $10^9$/L, and significantly elevated troponin I levels (initially 2069 ng/L and rising to over 25,000 ng/L). Iron studies showed low serum iron (9.3 µmol/L), marginally elevated ferritin (325.3 ng/mL) and reduced total iron-binding capacity (40.84 µmol/L). Vitamin assays confirmed severe vitamin B12 deficiency (59 pmol/L) with elevated folate (49.2 nmol/L). Given the profound B12 deficiency, immunological testing revealed the presence of anti-parietal cell antibodies and elevated intrinsic factor IgG, which confirmed the diagnosis of pernicious anaemia. Given the clinical features suggestive of hypothyroidism, thyroid function testing was performed, revealing a free T4 of 4.3 pmol/L, TSH of 108.96 mIU/L and anti-thyroid peroxidase antibodies >600 IU/mL, consistent with Hashimoto's thyroiditis. Levothyroxine and cyanocobalamin replacement therapy were initiated subsequently. These findings led to a diagnosis of APS type 3b, characterised by the coexistence of pernicious anaemia and Hashimoto's thyroiditis.

**CONCLUSION**

Hashimoto's thyroiditis (HT) and autoimmune gastritis (AIG) often coexist. Studies have shown that HT is present in 10–40% of patients with gastric disorders, and about 40% of those with AIG also have HT. This case emphasizes the need to screen for coexisting autoimmune conditions.

## EP_A062

### OVARIAN OVERDRIVE: FUNCTIONING GONADOTROPH ADENOMA LEADING TO SPONTANEOUS OVARIAN HYPERSTIMULATION

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**INTRODUCTION/BACKGROUND**

Functioning gonadotroph adenomas (FGAs) are rare pituitary tumours characterised by the hypersecretion of biologically active gonadotrophs. We report a case of a 22-year-old Malay female diagnosed with FGA with ovarian hyperstimulation syndrome (OHSS), highlighting her clinical presentation, management, and post-operative outcomes.

**CASE**

The patient first presented at age 19 with acute abdominal pain and irregular menstruation. An abdominal ultrasound

showed large bilateral multiloculated ovarian cysts, the largest cyst measuring 12 x 15 cm. She underwent laparotomy for left salpingo-oophorectomy and right ovarian cyst aspiration with histopathological examination (HPE) that ruled out ovarian malignancy.

Post-operatively, she remained amenorrheic with a thin endometrial wall despite progestin therapy. Follow-up scans showed persistent large ovarian cysts. Hormonal work-up revealed elevated estradiol (13422 pmol/L, NR 110-1468 pmol/L), unsuppressed FSH (31.8 IU/L, NR 3-8 IU/L) and raised prolactin (1551 mIU/L, NR 70-566 mIU/L) levels. She also had intermittent headaches but no visual disturbances, galactorrhea or hirsutism. MRI of the pituitary reported pituitary macroadenoma (1.8 x 2.6 x 2.9 cm) with suprasellar extension compressing onto the optic chiasm.

The patient successfully underwent transsphenoidal surgery (TSS) of the pituitary adenoma. Tissue HPE stained positive for synaptophysin (+), FSH (+) and LH (+), with a low Ki-67 index of 0.1%, confirming the diagnosis of FGA with stalk effect. Post-TSS, her gonadotropin level normalised, menstruation resumed and ovarian cyst size decreased. Follow-up MRI showed no residual tumour or recurrence.

**CONCLUSION**

FGAs are a rare differential diagnosis that needs to be considered in females presenting with spontaneous OHSS, accompanied by elevated serum estradiol and unsuppressed FSH. Early diagnosis and prompt transsphenoidal surgery can restore normal menstruation, improve fertility, and potentially avoid ovarian surgery.

## EP_A063

### UNMASKING SYNDROMIC HYPOPARATHYROIDISM IN PREGNANCY: A CASE OF BARAKAT SYNDROME

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**INTRODUCTION/BACKGROUND**

Hypoparathyroidism (HypoPT) is a rare endocrine disorder that presents unique challenges in pregnancy due to altered calcium homeostasis. While 75% of cases follow neck surgery, 25% arise from autoimmune, genetic or other causes. During pregnancy, elevated Parathyroid hormone-related peptide (PTHrP) suppresses PTH, while increased 1,25-(OH)2-D3 enhances calcium absorption, reducing maternal calcium requirements. Maintaining stable calcium levels is essential to prevent fetal hypocalcemia and secondary hyperparathyroidism.

**CASE**

A 24-year-old female at 37 weeks of gestation was incidentally found to have asymptomatic hypocalcemia. Two years earlier, during her first pregnancy, she experienced severe postpartum hypocalcemia accompanied by bilateral lower limb weakness. Investigations revealed a corrected calcium level of 1.65 mmol/L (reference range: 2.18–2.60), phosphate of 1.73 mmol/L (0.78–1.65), iPTH of 0.84 pmol/L (1.56–6.03) and a total 25-hydroxy vitamin D level of 28.88 nmol/L (≥75 nmol/L), leading to a diagnosis of vitamin D deficiency and HypoPT. Unfortunately, she was lost to follow-up. During her current pregnancy, blood tests showed a corrected calcium of 2.04 mmol/L, phosphate of 1.32 mmol/L and iPTH of 2.86 pmol/L. She remained clinically asymptomatic with no signs of hypocalcemia. The goal of management was to maintain calcium levels within the lower normal range until delivery. Further history revealed no prior neck surgery, but she had long-standing bilateral sensorineural hearing loss since childhood. Notably, her parents and siblings also had congenital deafness. Although rare, syndromic causes of HypoPT, such as Barakat syndrome (HDR syndrome), should be considered in patients with hearing impairment, renal disease, or congenital anomalies, especially with a strong family history.

**CONCLUSION**

This case highlights the importance of recognising syndromic HypoPT in pregnancy. Barakat syndrome, caused by GATA3 mutations, is characterised by HypoPT, deafness and renal disease, with the full triad in 62.3% of cases and HypoPT with deafness in 28.6%.

## EP_A064

### UNMASKING GASTRIC VOLVULUS IN THE SHADOW OF HYPOTHYROIDISM: A CASE OF ACUTE MESENTERO-AXIAL ROTATION

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**INTRODUCTION**

Gastric volvulus is a rare, life-threatening condition caused by an abnormal stomach rotation, potentially leading to obstruction and strangulation. The mesentero-axial type