pmol/L and suppressed TSH. Her TSH Receptor antibody showed elevated levels, and the initial CXR revealed cardiomegaly. She was started with oral carbimazole 30 mg daily, oral propranolol 20 mg 4 times a day, Lugol's iodine 4 drops 4 times a day, and intravenous hydrocortisone 50 mg q 6 hourly. Two anti-failure medications were used to treat her heart failure. Her symptoms improved, and she was discharged with oral carbimazole and oral propranolol.

CONCLUSION

It is important to plan an early definitive therapy in this case to prevent future cardiac decompensation during relapse. Medical practitioners need to be aware of the rare presentations of Graves' disease to avoid delayed diagnosis and treatment.

EP_P026

MATERNAL PREGNANCY LUTEOMA: A RARE CAUSE OF VIRILISATION IN A FEMALE NEWBORN AND MOTHER

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INTRODUCTION/BACKGROUND

Virilisation of a female newborn is commonly attributed to congenital adrenal hyperplasia but there are rarer causes that can be maternal in origin. Luteomas, a rare, benign androgen-producing ovarian tumour arising during pregnancy can result in both maternal and fetal virilization.

CASE

We describe a case of a newborn with ambiguous genitalia. This baby was born at 36 weeks via caesarean section for poor progress, weighing 2.8 kilograms at birth. Examination at birth revealed a prominent clitorophallic structure, fused labioscrotal folds but no palpable gonads. Otherwise, on general examination, there were no dysmorphic features or hyperpigmentation and serum electrolytes were normal with no hypoglycaemic episodes. On further assessment, 17 Hydroxyprogesterone (17-OHP) level was not elevated; karyotyping and radiological findings were consistent with a female gender. In hindsight, the mother recollected having signs of virilization, i.e., acneiform eruption on her upper chest and back, hirsutism, and deepening voice since the second trimester. Bilateral unhealthy, friable ovarian tumours were revealed intra-operatively which ruptured on handling. As the nature of the tumours was suspicious of malignancy, bilateral oophorectomy was done. Maternal beta human chorionic gonadotrophin (b-HCG) and alpha-fetoprotein (AFP) levels were elevated. The histopathological examination of the ovarian mass confirmed the diagnosis of pregnancy luteoma.

CONCLUSION

This case attests to the fact that rare causes of virilisation in a female baby cannot be overlooked. We thus need to be vigilant and have a high index of suspicion of maternal pregnancy luteomas as a possible cause of virilisation in a female baby.

EP_P027

PAEDIATRIC GRAVES' DISEASE AND DEFINITIVE TREATMENT

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INTRODUCTION

Paediatric Graves' disease (GD) is managed by antithyroid drugs (ATD), radioactive iodine (RAI) or thyroid surgery. This study aimed to describe the characteristics and outcomes of paediatric patients who received definitive therapy.

METHODOLOGY

Children and adolescents diagnosed with GD from 2012 to 2024 at the University Malaya Medical Centre were included in this retrospective review.

RESULT

A total of 37 patients were referred and diagnosed with GD; majority (78.4%) were female. Definitive therapy was given to 48%: 5 (35%) had total thyroidectomy and 9 (64%) received RAI. They had an average of four relapses during the disease. On average, the patients received ATD for 4.37 ± 2.28 years prior to the definitive treatment. The main factor in determining the choice of treatment was the size of the goitre. The mean goitre size for the RAI group was 21.68 ± 7.9 g, compared to 76.7 ± 22.88 g for the thyroidectomy group. Mean age in the RAI group was 15.53 ± 1.23 years. The youngest patient was 8 years old. Mean RAI dose was 9.3 ± 0.66 mCi. Six patients achieved hypothyroidism within 2.17 ± 2.44 months, while 1 patient achieved hypothyroidism 8 months post-RAI. Three had relapses post-RAI. Two patients required a second RAI one year later and achieved hypothyroidism within 2 to 4 weeks. Those who required a second RAI were given lower RAI doses initially (mean 5.6 ± 2.2 mCi). The mean age of patients who underwent total

thyroidectomy was 17.08 ± 0.78 years. Two out of 5 patients developed hypocalcaemia postoperatively. None had vocal cord paralysis.

CONCLUSION
From this cohort, the onset of hypothyroidism post-RAI was varied. Lower doses of initial RAI were seen in patients who had relapsed and required a second treatment. Total thyroidectomy in children and adolescents is safe with minimal complications under the care of a high-volume surgeon.

EP_P028

GRAVES' DISEASE WITH OSCILLATING THYROID FUNCTION

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INTRODUCTION/BACKGROUND
Oscillating thyroid status between hyper-and hypothyroidism in Graves' disease is a rare phenomenon. The change in the thyroid status is likely attributed to the simultaneous presence of both thyroid-stimulating autoantibodies (TSAbs) and TSH-blocking autoantibodies (TBAbs) in an individual.

CASE
We report the case history of a 14-year-old female who presented with goitre, palpitations and weight loss without eye signs. Thyroid function test revealed suppressed thyroid stimulating hormone and mildly raised free thyroxine. Antithyroid globulin antibodies and antithyroid peroxidase were both strongly positive. She was initially diagnosed as Hashimoto thyroiditis in hashitoxicosis and started on carbimazole. Four months later, the patient progressed into hypothyroid state requiring thyroxine therapy for 2 years. She however became hyperthyroid again in the past 1 year. Further evaluation revealed raised TSH receptor antibodies (TRAb) and hyperfunctioning thyroid gland on Tc99m thyroid radioisotope study, leading to a revision of diagnosis to Graves' Disease.

CONCLUSION
This case demonstrates Graves' disease with alternating thyroid status poses a challenge to the patient's diagnosis and management. Measurement of TRAb together with TSAbs and TBAbs would be helpful for diagnosis and to objectively explains the alternating thyroid function. Management includes close monitoring of thyroid function and possibly definitive therapy of radioactive iodine ablation or surgery in selected cases.

EP_P029

POLYOSTOTIC FIBROUS DYSPLASIA: RESPONSE TO ZOLENDRONIC ACID

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INTRODUCTION/BACKGROUND
Fibrous Dysplasia is a rare developmental bone disorder in which fibro-osseous tissue replaces normal bone tissue. It can manifest either monostotic or polyostotic associated with McCune-Albright syndrome. Bisphosphonates such as pamidronate and alendronate have been used to improve bone mineral density due to antiresorptive properties. However, the literature on the use of zoledronate is limited.

CASE
A 10-year-old female presented with a fracture of the right midshaft of the femur following a trivial fall. She had a history of precocious puberty and limping gait since the age of four years old. On examination, she was tall for her age and there was thoracolumbar scoliosis with huge cafe au lait patches at her lower back. Biochemically, she had elevated alkaline phosphatase level and low serum vitamin D. Skeletal survey revealed multiple patchy areas of lucency with irregular margins in the long bones, skull and pelvis. Bone mineral density was low suggestive of osteoporosis. Her fracture of the right midshaft of the femur was due to polyostotic fibrous dysplasia with underlying McCune-Albright syndrome. As bisphosphonate is required in fibrous dysplasia, she was treated with multiple doses of intravenous zoledronate starting at 0.0125 mg per kg which she tolerated well and then increased to 0.025 mg per kg. Her response was good, evidenced by reduced alkaline phosphatase level and improved bone mineral density. Her fracture healed with no complications or incidence of new fracture.

CONCLUSION
The administration of intravenous zoledronate enhances bone mineral density and demonstrates improvements in bone biomarkers. It was well tolerated and should be used in McCune-Albright syndrome with fibrous dysplasia of the bone.