

## Adult E-Poster

Upon diagnosis of osteoporosis, warfarin was replaced with rivaroxaban for anticoagulation and vitamin D replacement and calcium supplements were started, while no anti-osteoporosis medications were initiated. Annual BMD was done, and the latest imaging showed an improvement of 2.4% in the femoral neck compared to the previous year. Apart from the previously noted vertebral compression fractures, no new fractures were appreciated during follow-up. BMD monitoring will continue every 2 years.

### CONCLUSION

Osteoporosis in the young should be thoroughly investigated and managing the underlying condition is key to proper treatment.

## EP\_A103

### LIPOPROTEIN X-MEDIATED PSEUDOHYPONATREMIA IN A PATIENT WITH TYPE 2 DIABETES

<https://doi.org/10.15605/jafes.040.S1.111>

**Jun Kit Khoo,<sup>1</sup> Meng Loong Mok,<sup>2</sup> Pavai Sthaneswar,<sup>3</sup> Tharsini Sarvanandan,<sup>1</sup> Ying Guat Ooi,<sup>1</sup> Nicholas Ken Yoong Hee,<sup>1</sup> Quan Hziung Lim,<sup>1</sup> Lee-Ling Lim,<sup>1</sup> Jeyakantha Ratnasingam,<sup>1</sup> Shireene Ratna Vethakkan<sup>1</sup>**

<sup>1</sup>Endocrine Unit, Department of Medicine, Faculty of Medicine, Universiti Malaya, Kuala Lumpur, Malaysia

<sup>2</sup>Endocrine Unit, Hospital Putrajaya, Malaysia

<sup>3</sup>Department of Pathology, Faculty of Medicine, Universiti Malaya, Malaysia

### INTRODUCTION/BACKGROUND

Pseudohyponatremia is a lab abnormality commonly caused by hypertriglyceridemia, hyperglycemia or hypergammaglobulinemia. Lipoprotein X (LpX) is an abnormal lipoprotein that most commonly appears in the plasma of patients with cholestasis. LpX mediated pseudohyponatremia is rare but has been described in the literature. We report a patient with type 2 diabetes mellitus (T2DM) and LpX-mediated pseudohyponatremia due to severe cholestatic hepatitis.

### CASE

A 31-year-old female was admitted with newly diagnosed T2DM and severe DKA secondary to bilateral calf abscesses. She was treated with insulin and intravenous cefazolin as intraoperative tissue culture grew MSSA. Three days after starting cefazolin she developed progressively worsening severe cholestasis [peak total bilirubin (TB) 245  $\mu\text{mol/L}$  (reference interval (RI) <17), conjugated bilirubin 175  $\mu\text{mol/L}$  (RI <6), peak ALP 1027 U/L (RI 45-129), with normal

to marginally elevated transaminases] with negative viral and autoimmune serologies including AMA. Malignancy, biliary stones, and extra-hepatic cholestasis were excluded by imaging including CECT liver. Liver biopsy showed non-caseating granulomatous hepatitis, consistent with drug-induced liver injury secondary to cefazolin.

Concurrently, she developed hyponatremia despite adequate glycemic control on insulin therapy, that was established to be secondary to severe hypercholesterolemia [nadir serum sodium (sNa) 125 mmol/L (RI 136-145), serum osmolality 308 mmol/kg (RI 275-295), total cholesterol (TC) 30.6 mmol/L (RI <5.2), triglyceride 5.3 mmol/L]. Serum protein electrophoresis showed a supernumerary peak between albumin and alpha-1 region, suggestive of the presence of LpX. Cefazolin was discontinued and she was given a course of ursodeoxycholic acid (UDCA) for three months. Subsequently, TB and ALP dramatically improved, TC gradually declined and serum sodium became normal. During her most recent follow-up, her liver panel and serum sodium remained normal. TC, triglyceride, and LDL, while markedly improved, remained slightly elevated, compatible with her diagnosis of metabolic syndrome.

### CONCLUSION

Recognition of the relationship of cholestasis, elevated LpX and pseudohyponatremia is important to avoid mismanagement of hyponatremia. Electrophoresis confirms the diagnosis of LpX and diagnosed patients should subsequently be monitored for hyperviscosity secondary to hypercholesterolemia.

## EP\_A104

### A CASE OF LATE-ONSET HYPOPARATHYROIDISM FOLLOWING RECURRENT ANTERIOR NECK SURGERY RESULTING IN RHABDOMYOLYSIS

<https://doi.org/10.15605/jafes.040.S1.112>

**Guat Yee Lim<sup>1</sup> and Florence Tan<sup>2</sup>**

<sup>1</sup>Hospital Limbang, Limbang, Sarawak, Malaysia

<sup>2</sup>Hospital Umum Sarawak, Kuching, Sarawak, Malaysia

### INTRODUCTION/BACKGROUND

Hypoparathyroidism is a known complication of anterior neck surgery, with 1.5% becoming permanent. Delayed-onset hypoparathyroidism can manifest years postoperatively due to progressive scar tissue formation. It is often overlooked, causing complications. We present such a patient complicated by rhabdomyolysis and renal failure.

## Adult E-Poster

### CASE

A 78-year-old female with poorly-controlled diabetes mellitus presented with recurrent episodes of generalized weakness, lethargy and gastrointestinal symptoms since March 2024. She had undergone a total thyroidectomy in 2009 for multinodular goiter and neck surgery in 2022 for extensive neck abscess. Her calcium was normal in 2019 but no other postoperative monitoring was done.

She was admitted in March, May, and September 2024 with increasing myalgia, breathlessness, elevated creatine kinase (CK) (500 to 3000 U/L) and progressive renal dysfunction [creatinine: 93 mmol/L (March), 175 mmol/L (May), 422 mmol/L (September)]. Thyroid function tests were normal. Urinalysis showed proteinuria and hematuria. Extensive investigations for autoimmune myositis and renal failure were unremarkable, resulting in a presumed diagnosis of diabetic nephropathy.

In September, amid worsening renal function and persistent CK elevation, severe hypocalcemia (1.30 mmol/L\*) was finally recognized. Retrospectively, hypocalcemia (1.47 mmol/L) was first detected in May 2024, treated with intravenous calcium bolus, but not investigated. Immediate calcium infusion with oral calcium and calcitriol supplementation led to a significant CK reduction from 1233 U/L to 286 U/L, creatinine level decreased from 422 mmol/L to 315 mmol/L, with marked improvement of her symptoms and she was discharged without residual weakness. Subsequent follow-up showed further improvement in creatinine to 187 mmol/L and a stabilized CK level (235 U/L). Ultimately, hypoparathyroidism was confirmed to have an undetectable iPTH level.

### CONCLUSION

This case highlights the importance of recognizing delayed hypoparathyroidism and its presentation with severe rhabdomyolysis. Unawareness of this complication and a low index of suspicion can lead to prolonged misdiagnosis and exacerbate complications. Prompt recognition and treatment are crucial.

## EP\_A105

### BLINDED BY METASTASIS: A RARE CASE OF RENAL CELL CARCINOMA IN THE PITUITARY

<https://doi.org/10.15605/jafes.040.S1.113>

**Ilham Ismail,<sup>1</sup> Mahrunissa Mahadi,<sup>1</sup> Syarifah Syahirah Syed Abas,<sup>1,2</sup> Chee Koon Low,<sup>1,2</sup> Vanusha Devaraja,<sup>1,2</sup> Fei Bing Yong,<sup>1,2</sup> Norasyikin A. Wahab,<sup>1,3</sup> Norlaila Mustafa<sup>1,3</sup>**

<sup>1</sup>Endocrine Unit, Department of Medicine, Hospital Canselor Tuanku Muhriz

<sup>2</sup>Ministry of Health Malaysia

<sup>3</sup>Department of Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia

### INTRODUCTION/BACKGROUND

Renal cell carcinoma (RCC) is the most common primary kidney tumor, accounting for 1-3% of adult malignancies. Metastasis of RCC to the pituitary gland is extremely rare, with only a few reported cases. The time interval from primary tumor diagnosis to pituitary metastasis ranges from 3 months to 27 years, with a median interval of 1 year. Surgical resection is the treatment of choice in cases where vision deteriorates due to optic nerve compression. Adjuvant therapies may also be used, including radiotherapy, chemotherapy, immunotherapy, or targeted therapy. Here, we report a case of RCC metastasis to the pituitary presenting with impaired vision.

### CASE

A 62-year-old healthy male presented with progressive blurring of vision in both eyes, where the left eye was completely blind, and the right eye had tunnel vision. Constitutional symptoms occurred four months after undergoing right nephrectomy for RCC stage III. Magnetic resonance imaging revealed an enlarged sella with a solid lesion extending into the suprasellar region, compressing the bilateral optic chiasm and abutting both anterior cerebral arteries. He underwent transsphenoidal surgery, but the procedure was incomplete due to significant bleeding from the vascularized tumor. Two months later, a second decompression surgery was performed to preserve both the optic nerve and chiasm. Postoperatively, he developed panhypopituitarism and required hormone replacement therapy with thyroxine and hydrocortisone. Histopathology examination confirmed metastasis of clear cell renal carcinoma. Hence, radiotherapy and the tyrosine kinase inhibitor (TKI) Pazopanib were used as adjuvant therapies. Following treatment, the patient's vision remained stable, with neither improvement nor further deterioration.