CONCLUSION

Permanent central DI occurs when the hypothalamus and/or pituitary stalk is irreversibly injured. It is important to monitor DI in post pituitary surgery. One of the diagnostic tests used is WDT.

EP_A129

PYCNODYSOSTOSIS IN A YOUNG ADULT PRESENTING WITH FRAGILITY FRACTURE AND HIGH BONE MINERAL DENSITY: A CASE REPORT

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Amie-Anne Augustine, Jin Hui Ho, Hwee Ching Tee
Department of Endocrinology, Queen Elizabeth Hospital II, Kota Kinabalu, Sabah Malaysia

INTRODUCTION/BACKGROUND

Pycnodysostosis is a rare skeletal dysplasia and a subtype of osteopetrosis caused by deficient activity of the lysosomal protease cathepsin K (CTSK) gene. We present a case of pycnodysostosis exhibiting characteristic clinical features alongside a fragility fracture—an association that has been rarely reported.

CASE

A 33-year-old Malay female, born of a consanguineous marriage, presented with a subtrochanteric fracture of the proximal left femur following a trivial fall and underwent open reduction with locking compression plate fixation. She was noted to have a short stature (height: 145 cm). Further examination revealed frontal bossing, maxillary hypoplasia, and brachydactyly of both hands and feet. Other systemic examinations including neurological assessment were unremarkable. A family history of similar physical traits was noted in her late paternal grandmother, though medical records were unavailable. Her elder sister exhibited similar abnormalities. Laboratory investigations showed a low insulin-like growth factor 1 (IGF-1) level, but her insulin tolerance test was normal, excluding growth hormone deficiency. Other blood parameters, including complete blood count, serum calcium, phosphate, 25-hydroxy vitamin D, alkaline phosphatase, thyroid function tests, and cortisol were within normal limits. Bone mineral density (BMD) analysis revealed an elevated Z-score of +5.5 at the total hip and +0.9 at L1-L4. Genetic analysis identified a homozygous variant of uncertain significance in the CTSK gene, which is associated with autosomal recessive pycnodysostosis. Given the lack of a specific treatment, symptomatic management was initiated, focusing on fracture prevention, oral hygiene, and psychological support.

CONCLUSION

This case underscores the need to consider rare genetic skeletal dysplasias like pycnodysostosis in individuals presenting with fragility fractures, distinct craniofacial and skeletal features, and unusually high bone mineral density. Prompt recognition, aided by genetic testing, is crucial for guiding patient counseling, monitoring, and coordinated multidisciplinary care. Although no curative treatment exists, early diagnosis can help reduce complications and support a better quality of life.

EP_A130

A SURPRISING TWIST: HYPONATREMIA INDUCED BY ZOLEDRONIC ACID – A RARE CLINICAL PUZZLE

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Nurul Hayati Othman,[1] Nurbadriah Jasmiad,[2] Shartiyah Ismail[2]
[1]*University Malaya, Kuala Lumpur, Malaysia*
[2]*Hospital Sultanah Bahiyah, Kedah, Malaysia*

INTRODUCTION/BACKGROUND

Zoledronic acid is a potent bisphosphonate commonly used in the management of severe hypercalcemia, particularly in cases related to malignancy or metabolic bone disease. While hypocalcemia is a well-documented side effect following zoledronic acid administration especially in patients with primary hyperparathyroidism, there are no widely reported instances of hyponatremia in this patient population. We present a unique case of significant hyponatremia associated with zoledronic acid in a patient with primary hyperparathyroidism.

CASE

A 58-year-old female with a background of severe hypercalcemia secondary to primary hyperparathyroidism complicated by nephrocalcinosis and severe osteoporosis presented with recurrent hospital admissions due to severe hypercalcemic episodes. Over a two-month period, she received three doses of intravenous zoledronic acid infusion, followed by a single subcutaneous injection of denosumab. During follow-up in the clinic, laboratory investigations revealed significant hyponatremia (sodium: 113 mmol/L) and hypophosphatemia (phosphate: 0.52 mmol/L). There was no glycosuria, no hypokalemia, no hypouricemia and venous blood gas was not acidotic which excludes Fanconi syndrome. She was asymptomatic and denied any episode of vomiting or diarrhea. Secondary causes of adrenal insufficiency, syndrome of inappropriate antidiuretic hormone secretion (SIADH), hypothyroidism and diuretic use were excluded. With

appropriate fluid management, her sodium levels gradually normalized.

CONCLUSION

This case highlights a rare but clinically significant adverse effect of zoledronic acid therapy. Hypocalcemia remains the more commonly expected metabolic complication. A few cases of hyponatremia associated with severe diarrhea or vomiting following zoledronic acid administration have been reported in the literature. However, our patient did not exhibit such gastrointestinal symptoms. Although the exact mechanism by which zoledronic acid contributes to hyponatremia remains unclear, early recognition is crucial to prevent potential complications.

EP_A131

A SEPTIC MASQUERADE: MULTIFOCAL SEPTIC ARTHRITIS REVEALING DISSEMINATED MELIOIDOSIS IN A YOUNG PATIENT WITH TYPE 1 DIABETES

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Nur Iffah Illani Mohamed Rasidi,[1] Soo Huan Puah,[1] Wei Ping Lee,[1] Poh Shean Wong,[2] Fauzi Azizan[2]

[1]Medical Department, Hospital Jempol, Negeri Sembilan, Malaysia

[2]Medical Department, Hospital Tuanku Ampuan Najihah, Kuala Pilah, Malaysia

INTRODUCTION/BACKGROUND

Melioidosis, caused by *Burkholderia pseudomallei*, is a potentially fatal infection endemic to Southeast Asia and northern Australia. While often linked to type 2 diabetes mellitus, disseminated melioidosis in patients with type 1 diabetes mellitus (T1DM) is exceedingly rare, more so if with musculoskeletal involvement. We report a case of disseminated melioidosis presenting with multifocal septic arthritis, a thigh abscess, pulmonary infection, and splenic microabscesses in an adolescent with T1DM, highlighting the need for heightened vigilance in endemic regions.

CASE

An 18-year-old Indian female with T1DM since age of 13 (HbA1c 10.3%), on insulin aspart and detemir, presented with five weeks of fever, one week of painful left thigh swelling, and three days of cough. She was admitted with severe diabetic ketoacidosis and was empirically treated with intravenous ampicillin-sulbactam. Ultrasound of the left thigh revealed an abscess, which was drained; pus culture was positive for *Burkholderia pseudomallei*. Antibiotics were escalated to intravenous ceftazidime and trimethoprim-sulfamethoxazole.

Despite treatment, she remained febrile and required intubation on day eight of admission due to respiratory compromise. Blood and respiratory cultures also isolated *Burkholderia pseudomallei*. Computed tomography of the thorax, abdomen, and pelvis showed pulmonary infection (patchy ground-glass opacities, bilateral consolidation, minimal pleural effusion) and splenic microabscesses. Joint ultrasound revealed bilateral knee effusions and a complex right ankle effusion. Emergency arthrotomies and washouts of all affected joints yielded the same organism.

Her fever resolved with marked clinical improvement following complete source clearance. She was discharged ambulatory after six weeks of intravenous ceftazidime and a five-month oral eradication course, with optimized glycemic control. Follow-up imaging confirmed resolution of all lesions.

CONCLUSION

This case highlights that the aggressive and atypical presentation of disseminated melioidosis in T1DM may delay diagnosis. Persistent fever in endemic areas warrants prompt reevaluation. Early antibiotic escalation, timely surgical intervention, and multidisciplinary care were keys to recovery.

EP_A132

A CASE SERIES OF THREE CHINESE-MALAYSIAN PATIENTS WITH VARIED CHARACTERISTICS OF LATENT AUTOIMMUNE DIABETES IN ADULT (LADA)

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Muhammad Aiman Mohd Azhari, Mas Suria Mat Daud, Md Syazwan Md Amin

Endocrine Unit, Hospital Tengku Ampuan Afzan, Kuantan, Malaysia

INTRODUCTION/BACKGROUND

Latent autoimmune diabetes in adults (LADA) is an autoimmune diabetes typically present in adulthood with initial insulin independence and positive anti-glutamic acid decarboxylase (GAD) antibodies. Most progress to insulin dependence within six months of diagnosis.

We present three Chinese-Malaysian patients with LADA, each demonstrating varied presentations and management, all culminating in diabetic complications.

CASE

Case 1. A 53-year-old lean male with a 22-year history of presumed Type 2 Diabetes Mellitus (T2DM), initially