nephropathy being the most common (59.6%), followed by retinopathy and neuropathy. Approximately 5% of patients had macrovascular disease. More than two-thirds (70.8%) were on statin and half (56.9%) were on anti-proteinuria therapy.

CONCLUSION

Most patients with young-onset T2DM have poor glycaemic control despite being on intensive insulin therapy. Most patients fit the phenotype of obesity with metabolic syndrome suggesting possible insulin resistance, as opposed to depletion, as the key factor driving disease progression. Treatment strategies employed should focus on intensive lifestyle intervention and pharmacotherapy targeting weight reduction and insulin resistance as opposed to excessive insulin in this subgroup.

EP_A036

SCREENING AND TREATMENT OF DIABETIC KIDNEY DISEASE IN TYPE 2 DIABETES MELLITUS (T2DM) PATIENTS: A CLINICAL AUDIT AT HOSPITAL SULTAN HAJI AHMAD SHAH TEMERLOH, MALAYSIA

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INTRODUCTION/BACKGROUND

Diabetic kidney disease (DKD) is a global health challenge that has garnered increasing attention due to its significant impact on individuals and healthcare systems worldwide. In Malaysia, DKD accounted for the majority of new dialysis patients, increasing cardiovascular risk and hence, escalating healthcare expenses.

METHODOLOGY

This clinical audit aims to assess the screening and treatment of DKD among T2DM patients in Hospital Sultan Haji Ahmad Shah (HOSHAS), Temerloh, Pahang. All T2DM patients attending the diabetes clinic in HOSHAS from June to July 2023 were included in this clinical audit. Electronic medical records were assessed for demographic data, blood pressure and glycaemic targets, screening and treatment of macro- or microalbuminuria.

RESULTS

We included 141 patients in this audit. Of those, 63.8% were females, with a mean age of 52.8 ± 15.0 years and an average duration of diabetes of 13.0 ± 8.4 years. The screening rate for albuminuria was high (93.6%) but only 25.5% of the patients had further quantification of albuminuria. Overall, 31.9% achieved a blood pressure target of below 140/80 mmHg but only 19.0% with albuminuria achieved a BP target of below 130/80 mmHg. A total of 19.1% of patients achieved HbA1c of less than 7%. Among the patients with albuminuria, 71.2% were on ACE-i/ARB and 39% were prescribed SGLT2 inhibitors.

CONCLUSION

This audit highlights the importance of early detection and appropriate management of DKD in T2DM patients. Microalbuminuria assessment, optimal blood pressure and renal-modulation therapy are essential in preventing the progression of albuminuria and reducing the risk of ESKD in patients with diabetes.

EP_A037

GLUTAMIC ACID DECARBOXYLASE (GAD) ANTIBODIES-ASSOCIATED LIMBIC ENCEPHALITIS AND DIABETES: A CASE REPORT

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INTRODUCTION/BACKGROUND

Glutamic acid decarboxylase (GAD) is an enzyme involved in producing the major inhibitory neurotransmitter Gamma-Aminobutyric Acid (GABA). GAD antibodies have been implicated in the pathogenesis of insulin-dependent diabetes mellitus (IDDM) and a few neurological diseases such as the case below.

CASE

A 24-year-old male presented with a one-week history of fever, gradual memory impairment, behavioural changes and seizure. On arrival, he was confused and disoriented. His blood glucose was 18 mmol/L, HbA1c of 12.3% with acidosis at pH 7.30, bicarbonate of 19.7, serum osmolarity of 282 mmol/L and urine FEME showed ketone 2+, glucose 3+.

The lumbar puncture CSF sample was acellular with normal cerebrospinal fluid protein. Serum autoimmune and paraneoplastic panels were negative. EEG showed seizure activity at the right frontotemporal region with clinical evidence of piloerection. His brain MRI was abnormal with hyperintensity and swelling of the right medial temporal lobe. Correlating the history, EEG and radiological changes, his diagnosis is supportive of limbic encephalitis with newly diagnosed diabetes mellitus. Intravenous

methylprednisolone and intravenous immunoglobulin (IVIg) were given with marked improvement of symptoms. He was discharged with regular insulin and a tapering dose of oral steroids. He had positive GAD antibodies with two readings noted at 24.45 and 18.65 IU/ml. During subsequent clinic follow-up, his HbA1c improved to 10.8%

CONCLUSION

Limbic encephalitis (LE) is characterized by acute or subacute development of seizure, memory impairment, irritability, hallucinations and psychiatric symptoms. Its pathogenesis is related to an inflammation of the medial temporal lobes. Non-paraneoplastic LE related to GAD antibodies should be suspected if the patient has concomitant diabetes mellitus.

EP_A038

EFFECTIVE MULTI-FACETED APPROACH TO SEVERE HYPERTRIGLYCERIDEMIA IN DIABETES AND HYPERTENSION: A CASE REPORT

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INTRODUCTION/BACKGROUND

Diabetes mellitus, a metabolic disorder characterized by insulin deficiency, leads to increased release of free fatty acids and amino acids. This triggers glycogenolysis and gluconeogenesis, resulting in elevated production of very low-density lipoproteins (VLDL) and subsequent hypertriglyceridemia. Hypertriglyceridemia heightens the risk of atherosclerotic cardiovascular disease (ASCVD).

CASE

This case details the successful management of severe hypertriglyceridemia in a 45-year-old male with T2DM and hypertension. Despite non-compliance with treatment, the patient presented with asymptomatic severe hypertriglyceridemia, with a level of 45.4 mmol/L. A comprehensive approach involving pharmacological intervention, lifestyle modifications and laboratory consultation was implemented. After a thorough discussion on the impact of hypertriglyceridemia, the patient accepted the treatment regime. This included atorvastatin alongside existing anti-diabetic and anti-hypertensive medications, dietary counselling emphasizing a low-fat and high-fibre diet, regular exercise and treatment concordance. The patient demonstrated notable adherence to the prescribed regimen and incorporated smoking cessation and increased physical activity.

Over three months, significant improvements were observed in serum triglyceride levels, glycaemic control and blood pressure, reflecting the efficacy of the management approach. Additionally, laboratory consultation aided in interpreting lipid profiles and identifying pseudo-hyponatremia secondary to analytical interference from lipemic samples.

CONCLUSION

This case highlights the efficacy of a holistic strategy in addressing hypertriglyceridemia in individuals with diabetes and hypertension. Integrating atorvastatin therapy, dietary adjustments and lifestyle modifications resulted in significant enhancements in triglyceride levels, glycaemic management and blood pressure, thereby reducing cardiovascular risks.

Additionally, it highlights the crucial role of laboratory consultation in interpreting lipid profiles and identifying related anomalies in the test results, reinforcing the clinical significance of comprehensive patient care.

The comprehensive strategy for addressing diabetic dyslipidaemia is delineated, incorporating medication, counselling, lifestyle modifications, and enhanced laboratory collaboration.