CASE

We report a case of a 14-year-old male with no known premorbid conditions who presented with presyncope and a 1-month history of headache. On examination, he had severe hypertension (242/167 mmHg), tachycardia (127 bpm), and grade IV hypertensive retinopathy. Investigations showed preserved renal function with markedly elevated 24-hour urinary metanephrines (normetanephrine 90.75 µmol/L). Computed tomography revealed a lobulated, heterogeneously enhancing mass measuring 5.0 × 6.1 × 5.4 cm along the left margin of the abdominal aorta at the infrarenal level, suggestive of an extra-adrenal lesion. Gallium-68 PET scan demonstrated a somatostatin receptor–avid left peritoneal mass. The patient underwent exploratory laparotomy and tumor excision, complicated intraoperatively by blood pressure lability requiring nitroprusside and inotropic support. Postoperatively, he improved significantly and was able to wean off all antihypertensive medications. Histopathology confirmed left retroperitoneal paraganglioma.

CONCLUSION

Primary peritoneal paraganglioma is a rare but important cause of secondary hypertension, especially in young patients presenting with hypertensive emergency. High index of suspicion is essential for early diagnosis. Management requires a multidisciplinary approach with careful preoperative optimization to minimize perioperative complications. Surgical resection remains the definitive treatment and, as demonstrated in this case, can result in marked clinical improvement with resolution of hypertension.

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WARBURG EFFECT–ASSOCIATED NON–INSULIN-MEDIATED HYPOGLYCEMIA IN CHRONIC INFECTION

Tilagamaty Murthy[1], Sharifah Noor Adrilla Long Mohd Noor Affendi[1], Shazatul Reza Mohd Redzuan[1], Gayathri Devi Krishnan[1], Subashini Rajoo[1]
[1]Endocrine Unit, Department of Internal Medicine, Hospital Kuala Lumpur

INTRODUCTION

The Warburg effect refers to a metabolic shift in which cells preferentially utilize aerobic glycolysis rather than oxidative phosphorylation despite adequate oxygen availability. This phenomenon is increasingly recognized as the mechanism for tumor-associated hypoglycemia, or paraneoplastic syndromes such as insulin-like growth factor-2 (IGF-2)–mediated non-islet cell tumor hypoglycemia. We present a case of Warburg effect with management challenges.

CASE

A 47-year-old male with advanced, treatment-naive retroviral disease presented with chronic cough, progressive right thigh swelling, constitutional symptoms over several months, followed by reduced responsiveness for 2 days prior to admission. Clinically, he was delirious, cachectic with generalized lung crepitations and right thigh mass. He was diagnosed with smear-negative disseminated tuberculosis, and thigh mass was considered either a tuberculous granuloma or sarcoma.

During hospitalization, he developed recurrent hypoglycemia with lactatemia despite intravenous dextrose, optimized enteral feeding and a 1-day course of intravenous octreotide. His blood investigations showed full blood count, renal function test, liver function test, and serum ketone within normal range. His arterial blood gas analysis showed type B lactic acidosis with persistent lactatemia.

At the time of hypoglycemia (RBS: 3.1 mmol/L), his serum insulin was suppressed, C-peptide was low–normal, morning cortisol was elevated, and IGF-1 was markedly reduced suggestive of non-insulin-mediated hypoglycemia secondary to Warburg effect.

CONCLUSION

In patients with retroviral disease and tuberculosis, Warburg effect may lead to poorer clinical outcomes and management may be challenging. Thus, definitive antimicrobial therapy with second generation somatostatin analogues (Pasireotide) may be considered in selected cases to modulate dysregulated hormonal and metabolic pathways. Early identification and timely targeted intervention are crucial to improving outcomes in this high-risk population.

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WHEN HYPOGLYCEMIA SPEAKS LOUDER THAN THE CHEST: A DECADE-LATE RECURRENCE OF IGF-2-MEDIATED NON-ISLET CELL TUMOR HYPOGLYCEMIA

Li Li Kwan[1] and Deviga Lachumanan[2]
[1]Department of Internal Medicine, Hospital Port Dickson
[2]Endocrinology Unit, Department of Internal Medicine, Hospital Port Dickson

INTRODUCTION

Non-islet cell tumor hypoglycemia (NICTH) is a rare paraneoplastic syndrome caused by tumor secretion of insulin-like growth factor-2 (IGF-2), leading to recurrent hypoinsulinemic hypoglycemia. It is most commonly associated with large mesenchymal tumors, such as solitary