conferenceseries.com

European Endocrinology and DIABETES CONGRESS

August 05, 2021 | Webinar

Case report: Thyrotoxic periodic paralysis in a 25years-old female

E Manrique, L Rivera, C Ambrosi, Y Lombi, R Avila

Hospital Privado Universitario de Cordoba. Argentina

Statement of the Problem: Acute hypokalemic paralysis is a rare cause of acute weakness. Morbidity and mortality associated with unrecognized disease can occur and include respiratory failure and possibly death. Common causes of hypokalemic paralysis include thyrotoxic periodic paralysis (TPP). TPP is characterized by sudden onset of hypokalemia and paralysis that primarily affects the lower extremities. Methodology & Theoretical Orientation: We describe a 25-year-old female who presented with acute onset paralysis secondary to acute hypokalemia and was found to have new onset Graves disease. Findings: A 25-year-old healthy woman, with no past medical history, presented to the emergency department with acute onset generalized muscle weakness, more pronounced in her upper extremities. The patient described several falls and stumbles during the last 24 hours before consultation. She decided to go to the hospital because she wasn´t able to get up of the bed. Physical examination revealed a blood pressure: 110/60 mmHg, pulse: 110 beats per minute, temperature: 36,2°C, respiratory rate: 16 breaths per minute, and oxygen saturation: 97% on room air. He was alert, oriented, and in no acute distress. Cardiopulmonary and abdominal examinations were unremarkable. Neurologic exam was positive for brisk and symmetric patellar reflexes and fine tremors in bilateral hands with extension and strength was 4/5 in all muscle groups of bilateral upper and lower extremities. The remaining neurological examination was unremarkable. Initial laboratory findings are show in Table 1. Periodic hypokalemia paralysis was made. Treatment began with the improvement of clinical symptoms. Initial thyroid-stimulating hormone level (TSH) returned at returned at returned at <0.01 mU/L (0.25–4.00 mIU/L), free thyroxine (T4) level: 5.9 ng/dL (0.8–2.2 ng/dL). Thyrotoxicosis was diagnosed and began specific treatment. Conclusion & Significance: It is vital for physicians to be able to differentiate TPP from familial hypokalemic periodic paralysis, a more common cause of periodic paralysis.

Table 1: Most important laboratory findings

Laboratory	Value	Normal range
Potassium	1.8 mmol/l	3.5 – 5.0
Magnessium	0.66 mmol/l	0.75 – 1.75
Phosphorus	1.9 mg/dl	2.7 – 4.5
Ph	7.38	
HCO3	21	
BE	-3.1	
TSH	<0.01 mU/l	0.25-4.0
T4	5.9 ng/dl	0.8-2.2
T3	3.3 ng/ml	0.8-1.9
TRAB	9.3 U/l	<1.75

Biography

Ezequiel Manrique is specialist in Intensive care medicine and expertise in Nutritional support. He is medical staff in Critical Care Unit at Hospital Privado Universitario de Cordoba and Chief of Special Nutrition Unit in Hospital Privado Universitario de Cordoba. He is Director of Nutritional Support and Metabolism Comitee of Sociedad Argentina de Terapia Intensiva.

drmanriqueezequiel@gmail.com