

Thyroid storm: is there a role for thyroid function test?

ABSTRACT

Introduction: Thyroid storm (TS) is an endocrine emergency. Early diagnosis for prompt treatment is essential as it has a high mortality rate. Case report: A 31-year-old lady with underlying hyperthyroidism, dilated cardiomyopathy with severe mitral regurgitation presented with shortness of breath. She was intubated and admitted due to decreasing Glasgow Coma Score. Her blood investigations revealed increased white cell count, raised free thyroxine with suppressed thyroid stimulating hormone, deranged liver, renal and coagulation profiles. As her condition did not improve with initial treatment, plasmapheresis was commenced on day 4. Biochemically, her thyroid function test (TFT) showed improvement; however, she succumbed due to multi-organ failure. Discussion: Plasmapheresis is considered in TS if there is no clinical improvement within 24-48 hours of initial treatment. The improvement in patient's TFT post plasmapheresis signifies its role in treating TS. Unfortunately, there was a delay in commencing plasmapheresis due to haemodynamic instability in this patient.

Keyword: Thyroid storm; Hyperthyroidism; Thyroid function test; Plasmapheresis