

Introduction

Myxedema crisis, an uncommon condition with an incidence of about 0.22 cases per million per year, stemming from severe hypothyroidism, poses a life-threatening risk. This abstract highlights a case of a 50-year-old woman displaying a myxedema crisis and secondary adrenal insufficiency triggered by a gastrointestinal infection.

Case Presentation

A 50-year-old generally healthy female was admitted with abdominal pain and altered mental status following a three-day episode of watery, non-bloody diarrhea. She did not have any nausea, vomiting, or fever. Her blood pressure was 80/40, pulse rate was 58, and saturating was normal at room air. Her temperature was average. Physical findings included pallor, non-pitting edema in both lower limbs, coarse skin with patchy hair loss on the scalp, and cold peripheries. Auscultation revealed bilateral basal crepitations with soft S1 and S2. Deep tendon reflexes were reduced. Further inquiry revealed lactational failure after her third delivery.

Laboratory investigations revealed a total blood count of 3.9K (4.5-10.5), hemoglobin of 9g/dl (11-15), platelets of 117K (120-400), and normal electrolytes. ECG displayed T-wave inversion with first-degree AV block, and chest X-ray revealed bilateral perihilar hazy infiltrates. Hormonal profiling indicated TSH of 0.932 (0.27-4.2), T4 of 0.632 (4.8-12.7), T3 of 0.326 (0.8-2), cortisol of 28.6 (171-536), and ACTH of 3.39 (7.2-63.3). Echocardiography demonstrated ejection fraction of 40% and global hypokinesia. The Myxedema crisis score was 75. CT scan of the abdomen was not obtained.

She was diagnosed with panhypopituitarism, likely Sheehan's syndrome, presented as myxedema crisis and secondary adrenal insufficiency. She was treated with IV normal saline, levothyroxine 300 mcg followed by 150 mcg, and an injection of Hydrocortisone 100 mg. With this regimen, her sensorium improved, her blood pressure normalized, and a repeat 2D echo showed a normal LVEF after three days. She was discharged on levothyroxine 100 mcg OD and hydrocortisone 10 mg.

Discussion

Myxedema crisis is a severe, life-threatening form of decompensated hypothyroidism, which is associated with a high mortality rate. A high index of suspicion, early recognition, admission to intensive care units, and treatment with levothyroxine and intravenous hydrocortisone are paramount in the management of the myxedema crisis.