conferenceseries.com

European Endocrinology and DIABETES CONGRESS

August 05, 2021 | Webinar

Severe Hyponatremia and Syndrome of Inappropriate AntiDiuretic Hormone Secretion (SIADH) as a primary presentation of Neurosarcoidosis

Asad Amin

St. Luke's General Hospital, Kilkenny, Ireland.

Sarcoidosis is a multi-system inflammatory disease of unknown etiology characterized by abnormal collection of inflammatory cells termed as granulomas1. It is femalepredominant condition, and most patients develop respiratory system involvement2. This disease usually involves lungs, skin, or lymph nodes, but can less commonly affect the eyes, liver, heart and brain. Neurological involvement is rare and appears in 5-10% of the cases3. Most common neuroendocrine manifestation is diabetes insipidus, followed by amenorrhea and galactorrhea. SIADH is rare and hyponatremia is uncommon presentation, but few cases have been reported4,5. In this case we describe a rare presentation with symptomatic hyponatremia and SIADH.

Case Report

A 52-year-old male presented with worsening confusion, lethargy and poor sleep. He had multiple presentations with hyponatremia and diagnosed with SIADH likely secondary to the anti-epileptic medicines. He had background history of epilepsy, crohn's disease, hypertension and hemochromatosis.

On examination, there were no focal signs of neurological involvement other than intermittent confusion and difficulty in organizational skills. He was found to have severe hyponatremia (Na 118 mmol/L) with serum hypo-osmolality. Anti-epileptic medications were revised in the context of SIADH. High sodium diet and fluid restriction were advised.

Later, he had computed tomography (CT) of thorax, abdomen and pelvis which revealed mediastinal and hilar lymphadenopathy with normal liver parenchyma. His serum angiotensin converting enzyme (ACE) levels were raised with a value of 99 U/L, however; calcium levels were within normal range. He had mild hyperprolactinemia with slightly low thyroid stimulating hormone (TSH) and estradiol levels. Magnetic resonance imaging (MRI) of his brain revealed features consistent with neurosarcoidosis and endobronchial ultrasound biopsy of mediastinal lymph nodes showed non-caseating granulomas thus confirming the diagnosis of sarcoidosis.

Treatment

Patient was started on oral steroids, tab prednisolone 1 mg/kg body weight with fluid restriction. His sodium levels started improving with improvement in his clinical symptoms. He was advised follow-up in endocrinology and neurology clinics

Discussion

Sarcoidosis is a chronic inflammatory disorder and involves neurological system in 5-10% cases termed as neurosarcoidosis6. It may present with various neurological symptoms including mental state changes. Severe hyponatremia may develop due to hypopituitarism and secondary hypocorticolism. The most common cause of hyponatremia in neurosarcoidosis is SIADH due to the deposition of granulomas in posterior pituitary. In some studies, sarcoidosis has been shown to cause the syndrome of inappropriate ADH secretion, and hence the hyponatraemia4,5. Possible endocrine manifestations of sarcoidosis include obesity, body temperature dysregulations, personality change, SIADH, diabetes insipidus (50%), hyperprolactinemia, hypoadrenalism and growth hormone deficiency7. Thyroid dysfunction is seen in 4.2–4.6% of cases. In this case the etiology of hyponatremia and SIADH was thought to be neurosarcoidosis and significant improvement was noted after the corticosteroid therapy.

Conclusion

This case report highlights that SIADH presenting with severe hyponatremia can be a primary presentation of neurosarcoidosis. In conclusion, Sarcoidosis should be considered in the differential diagnoses of SIADH and electrolyte imbalance.

Acknowledgements

We would like to say special thanks to the organizers of the 23rd European Congress of Endocrinology 2021 who gave us the opportunity to present this interesting case and participate in this informative academic event.

drasadamin@hotmail.com