Central pontine myelinolysis
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OBJECTIVE:
Central pontine myelinolysis is a neurological disorder characterized by loss of myelin in the central pons as well as in the other parts of the brain like basal ganglia, lateral geniculate bodies, external and internal capsules, and cerebellum. While the causes and pathogenesis of central pontine myelinolysis remain unclear, many studies suggest that rapid correction of hyponatremia is a major factor in the pathogenesis of osmotic stress in the pontine and extra pontine gliy. In this case we wanted to draw attention to central pontine myelinolysis in a patient with chronic alcoholics.

CASE: 73 year old male patient was referred to our emergency department with complaints of consciousness. In the story three days while being treated in the internal medicine service in other center he had a consciousness which started the same day he came to emergency department. Patients have been using chronic alcohol and cannabis. On physical examination, the general condition was bad. Blood pressure: 100/60 mmHg body temperature: 36.4 pulse rate 65 respiratory rate 18/min GCS: 9. The patients neurological examination was lethargic did not have orientation, cooperation. The patient was quadriplegic, Babinski (+), on the left, DTR is hypoactive. Laboratory results: creatinine 0.9 mg/dL, sodium 154 mmol/L, potassium 2.90 mmol/L, as: 1271 u/L, ALT: 5121 u/L. ABG: pH: 7.494 PCO₂: 38.5 mmHg PO₂: 69 mmHg SO₂: 88% BE: -4.5 mmol/L, HCO₃: 21.7, urinalysis: normal. 3 days ago sodium was observed 116 mEq/L while he was in other center. Cranial computed tomography was normal. Diffusion MRI was planned preliminary diagnosis of central pontine myelinolysis. In the central pontine, there was no diffusion restriction, the scene covering the pons, T2 signal was increased. The lesion was interpreted as a Pontine myelinolysis. The patient was hospitalized in the intensive care unit.

CONCLUSION: Central pontine myelinolysis is considered an iatrogenic disease which is resulting from rapid correction of hyponatremia. If we suspected diagnosis for central pontine myelinolysis, cranial MRI should be required.

Keywords: Central pontine myelinolysis, hyponatremia, emergency medicine