Middle-aged man with acute onset quadriparesis

Sir,

The grand rounds case presented by Kumar et al. describes a patient who presented with acute flaccid paralysis and hypokalemia and concludes with the diagnosis of small cell carcinoma of the lung with ectopic corticotrophin syndrome.[1] We believe there are a few additional points that are pertinent and deserve mention.

1. Firstly, in discussing the potential causes of the persistent hypokalemia in their patient, the authors mention rare causes like renal tubular acidosis (RTA), metabolic acidosis and Bartter’s syndrome. We don’t completely agree with this. From the given information, it is clear that the patient has a hypokalemic metabolic alkalosis, making the diagnosis of RTA and metabolic acidosis very unlikely. Also, the patient is noted to be hypertensive with peripheral edema, which are features that are notably absent in Bartter’s syndrome. Moreover, Bartter’s syndrome tends to present in childhood, rather than in adults. Gitelman’s syndrome, on the other hand, is seen in adolescence or adulthood, but again, like Bartter’s syndrome, does not have hypertension and edema as clinical features.

Hypokalemia can be associated with metabolic acidosis in conditions such as RTA, diabetic ketoacidosis, acetazolamide use and gastrointestinal losses via adenosine and diarrhea.

2. Another teaching point here is the use of the urinary chloride as an aid in the workup of hypokalemie metabolic alkalosis. Woywodt et al. provide a good review of this approach.[2] The mention of the serum and urinary chloride would have made the workup more interesting. Also, the authors fail to mention hypomagnesemia as a potential cause of persistent hypokalemia. Hypomagnesemia is often a coexisting problem in hypokalemia and the ability to correct hypokalemia is impaired in the presence of hypomagnesemia.[3] I appreciate that given the overall context of the case, this was probably not a very important point, but as an internist, this is a problem one faces frequently and is worth keeping at the back of the mind.

3. Lastly, the authors also mention that the patient in the case had peripheral edema, diabetes, hypertension, skin pigmentation and metabolic acidosis, suggesting Cushing’s syndrome as a likely diagnosis. It is not clear if the “metabolic acidosis” is a typographic error as from the information provided, the patient clearly has a metabolic and respiratory alkalosis. Moreover, hyperaldosteronism is associated with metabolic alkalosis rather than acidosis.

References


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