

Liquorice induced hypermineralocorticoidism – A Case report from Midyorkshire Hospitals NHS trust

Background:

Excessive ingestion of Liquorice produces a state of apparent mineralocorticoid excess may result in sodium and water retention, hypertension, hypokalemia and suppression of the renin-aldosterone system. Yorkshire is famous for Liquorice confectionaries. In this paper we discuss about a patient with persistent hypokalemia secondary to excessive liquorice.

Case Report:

50 years old lady referred by GP with one year history of hypertension on Ramipril and fluctuating potassium levels (between 2.4-3.7mmol/l). PMH of Migraine and recurrent UTIs. O/A: BP 202/118, Ramipril replaced with Amlodipine & Spironolactone. BP 140/80 mmhg on discharge with normal potassium & renin/aldosterone ratio. She got readmitted to MAU twice for IV potassium replacement.

History was reviewed when she was referred to Endocrine clinic. She was asymptomatic with low potassium, stable weight and no symptoms of diabetes. She doesn't smoke and drinks alcohol occasionally. She worked as Children centre manager. On further questioning, interestingly she did admit that she used to eat significant amount of liquorice (Pontefract cakes) although she stopped this recently (4months ago) which normalised her potassium & BP. O/E: PR:80/min regular, BP 130/78mmhg, no cushingoid features. Systemic examination was unremarkable. We repeated her serum potassium which was 4.2mmol/l. This is a classic case of liquorice induced hypokalemia. We suggested to the patient that she doesn't need to give up liquorice altogether, perhaps they should be eaten intermittently to avoid recurrence. Subsequently she was discharged from clinic. In this case, we would like to reiterate the importance of obtaining the relevant basic history, which prevents further expensive investigations and admissions.

Conclusion:

Appropriate history taking remains the most fundamental aspect of clinical medicine which is fading away in this busy modern medicine. Physicians should also look into patient's demography which would have clinched the diagnosis straight away in this case.