

A case of dystonia in dialysis

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Extrapyramidal movement disorders are rarely reported in uremic patients. Most cases of bilateral basal ganglia injury in ESRD are in diabetic patients. Dialysis pts are prone to metabolic derangements that predispose them to basal ganglia injury. This is a case of acute movement disorder in a nondiabetic pt with ESRD on hemodialysis.

Case: 68 years old AA female with ESRD on hemodialysis for two years, admitted with vomiting, weakness for one day. Past Hx: hypertension, dyslipidemia, ESRD, depression. Meds: Clonidine, Lexapro, Lipitor, Sensipar, Zemplar, Lisinopril, Renvela, Procrit, sodium bicarbonate. PE: BP: 239/141 mmHg, PR: 132/min, Temp: 95.7, RR: 24/min, Pulse o2: 100% on 2L of oxygen. Card: S1, S2 with tachycardia, S3 gallop. Resp: Crackles at both lung bases. Neuro: Intact. Extremities: left upper arm dialysis access. CT Head: atrophy with microangiopathy. Chest Xray: CHF. EKG: Sinus tachycardia. Patient started on symptomatic treatment, dialysis was ordered. 2 hours into dialysis patient developed altered mental status. BP dropped to 77/59 from 133/94; dialysis was d/c'd. Blood glucose 102. Sats dropped to 78% on room air. Patient given saline and albumin, and BP rose to 138/79 mmHg. Patient opened eyes to voice and localized pain. Head rotated to left lateral side, in generalized stiff posture with cervical rigidity, rigidity of extremities. No clonic movements. Lungs showed scattered wheezes. Patient given IV Benadryl and stat ABG was normal. Within 30 minutes patient woke, confused with rigidity of extremities. Patient then diagnosed with acute dystonic reaction with a score of 40. Brain MRI-extensive punctate to patchy foci of bihemispheric small vessel disease with white matter flair. Bilateral T2 hyperintensities and corresponding T2 hypointensities related to prominent perivascular spaces or remote lacunar infarct in the basal ganglia. Bilateral basal ganglia calcifications noted, small right and left thalamic infarctions. The following day, dystonia resolved. Neurology advised supportive management. Patient experienced no further dystonia.

Discussion: There are few reported cases of acute extrapyramidal movement disorders in patients with ESRD on dialysis. In this case, neuro workup failed to identify a cause of basal ganglia injury. Given the MRI finding, it is possible that intradialytic hypotension superimposed on underlying cerebral microvascular disease in the basal ganglia precipitated dystonic symptoms. Rapid correction of uremia has been shown to lead to dialysis disequilibrium syndrome. Most cases of bilateral basal ganglia injury in patients with ESRD are patients affected with diabetes. This patient was nondiabetic with no abnormal glucose values or acid base disorders noted. Studies are needed to establish the prevalence of this disorder in ESRD patients and associations between basal ganglia injury, diabetes and dialysis-related risk factors.

Biography

Anusha Nallaparaju is a current PGY-2 resident at the Baton Rouge General Internal Medicine Residency Program, affiliated with Tulane University School of Medicine, in Baton Rouge, Louisiana. She graduated from G.S.I Medical College, India in 2010 and subsequently started working as a research assistant at New York Downtown Hospital, in New York City. She also worked as a Clinical Research Coordinator for two Phase -2 clinical trials prior to joining her residency program.

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