

Mid-Hemodialysis Levetiracetam as Rescue Therapy in Patients Having Seizures During Hemodialysis Session

Dear Editor,

Hemodialysis (HD)-associated seizures are a frequent complication.¹ Individuals receiving HD exhibit a higher propensity for seizures than those on peritoneal dialysis.² We observed two patients aged 72 and 66 years, with type 2 diabetes mellitus, hypertension, hypothyroidism and seizure disorder, undergoing maintenance hemodialysis. Both were on a regimen of levetiracetam 500 mg twice daily. An additional dose of levetiracetam 250 mg was also administered as per the recommendation. Despite this, both experienced seizure episodes during HD, leading to multiple admissions to the intensive care unit and inadequate dialysis sessions. HD is known to lower serum levetiracetam levels, potentially resulting in subtherapeutic concentrations.³ To address this issue, we administered an additional 250 mg dose of levetiracetam to both patients one hour after initiating the HD session. This adjustment effectively prevented further seizures. It has been suggested that rapid changes in the osmotic and chemical compositions of extracellular fluid during HD may contribute to the pathogenesis of HD-associated seizures.⁴ For patients on dialyzable antiepileptic medications having a preference for HD, administering an additional dose (in this case, levetiracetam) midway through the HD session appears to be a viable strategy.

Conflicts of interest: There are no conflicts of interest.

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Mycophenolate-Induced Dysphagia in a Kidney Transplant Recipient

Dear Editor,

Upper gastrointestinal (GI) symptoms such as dysphagia and odynophagia in immunocompromised hosts are generally caused by viral or fungal infections.¹ We present a kidney transplant recipient who developed progressive dysphagia and odynophagia caused by mycophenolate mofetil (MMF) that improved after discontinuation of MMF and serial endoscopic esophageal dilatation.

A 49-year-old male [cytomegalovirus immunoglobulin G negative (CMV IgG –ve), Epstein-Barr virus immunoglobulin G positive (EBV IgG +ve)] underwent living donor kidney transplantation from his sister (CMV IgG +ve, EBV IgG +ve) using Thymoglobulin induction and tacrolimus/MMF maintenance along with infection prophylaxis using valgancyclovir, trimethoprim-sulfamethoxazole, and nystatin. Discharge serum creatinine was 1.5 mg/dL. One month

later, he developed progressive dysphagia, odynophagia, reduced appetite, and weight loss. MMF was replaced with azathioprine. The upper endoscopy showed a benign intrinsic severe distal esophageal stricture that was dilated to 7 mm and biopsy showed focal acute inflammation [Figure 1]. Specimen stained negative for fungal elements, CMV and herpes simplex virus (HSV). He required nine more stricture dilatations in over three months to a final diameter of 18 mm. Dysphagia gradually resolved with better dietary intake and weight gain over the next few months.

MMF selectively acts on B and T lymphocytes. Gastrointestinal (GI) toxicity is reported in 40–85% of patients taking MMF and more commonly involves the lower GI tract.² Upper GI toxicity usually results in ulcerative esophagitis, reactive gastropathy, and duodenal ulcers. MMF-related esophageal stricture is extremely rare. The mechanism of MMF-related GI toxicity is not clear but may involve MMF-induced