

006. Hospital and Emergency Department Utilization in US Veterans with Hyperkalemia

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Purpose: Hyperkalemia (HK) is a potentially life-threatening metabolic disorder and a challenging clinical problem for clinicians caring for patients with chronic kidney disease (CKD), diabetes mellitus (DM) and heart failure (HF). HK is common in older patients with cardiorenal comorbidities and often limits the use of guideline recommended Renin Angiotensin Aldosterone System inhibitors (RAASi) medications. Patiromer is a sodium-free, non-absorbed potassium (K⁺) binder (KB) approved for the treatment of hyperkalemia (HK). Here we aim to describe electrolyte-related Healthcare Resource Utilization (HRU) in Veterans with HK who initiated patiromer or discontinued RAAS inhibitor (RAASi DC) therapy and were not receiving a KB (1/1/2016–8/30/2018).

Method: Using retrospective, observational data, patients utilizing a Veterans Affairs hospital or Emergency Department (ED) during the 6 months prior to the index date were assessed at 1, 3, and 6 months post-index. The index date was the date of patiromer initiation or the date of RAASi DC in patients not receiving a KB (RAASi DC/no KB). All patients had a baseline serum K⁺ \geq 5.1 mEq/L and HF, DM, or non-dialysis dependent CKD. Follow-up began at index date and ended at first censoring event (discontinuation or switch of index KB, death, end of follow-up, or 6 months post-index). Patients with continuous exposure to patiromer and those who did not restart RAASi were analyzed.

Results: 288 and 26,543 patients were included in the patiromer and RAASi DC/no KB groups, respectively. At baseline, the mean age was 70 years (patiromer) and 72 years (RAASi DC/no KB) with the majority of patients being male (98%) and 24% and 15% African-American (patiromer and RAASi DC/no KB groups, respectively). In both cohorts, 83% of patients had DM at baseline, while a higher percentage of patients had advanced CKD, HF and greater utilization of the ED and hospital in the patiromer group. When evaluating patients with an electrolyte-related hospitalization or ED visit in the pre-index period, we observed no electrolyte-related hospitalizations or ED visits in patients with continuous exposure to patiromer at 1, 3, and 6 months post-index. In the RAASi DC/no KB group, 25% of patients reutilized the ED or hospital within 6 months.

Conclusion: At baseline, more than 80% of both cohorts had a diagnosis of diabetes but in the patiromer cohort a greater percentage of patients had heart failure, advanced CKD, and a higher utilization of the ED and hospital at baseline. We observed that patients continuously exposed to patiromer at 1, 3, and 6 months did not experience any additional utilization of the ED or hospital after initiation of treatment. This is a descriptive observational study so no comparative or causal claims can be made and given the limited number of patiromer users, additional investigation is warranted.