Phosphorus Control and Pill Burden among In-Center Hemodialysis and Peritoneal Dialysis Patients Converting to Sucroferric Oxysulfate

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Introduction

- Sucroferric oxysulfate (SO) is an iron-based phosphate binder (PB) indicated for the control of serum phosphorus levels in patients with chronic kidney disease on dialysis.
- In clinical trials, 1,2 SO demonstrated:
  - Equivalent control of serum phosphorus relative to sevelamer
  - A lower daily pill burden than sevelamer
- The current analyses examine the real-world effectiveness of SO to lower serum phosphorus in dialysis patients.

Objective

To evaluate serum phosphorus and PB pill burden in patients who converted to SO from another PB as part of routine care.

Methods

- Data were derived from the electronic health records of a large dialysis organization (LDO) and the prescription records
- Patients eligible for inclusion in this study were ≥ 18 years old, receiving in-center hemodialysis (ICHD) or peritoneal dialysis (PD), and had supply of a non-SO PB. Given implied carry over non-SO PB supply, these subgroupings were not considered for month 1 of follow-up.
- Characteristics of ICHD and PD patients prior to SO initiation are presented in Table 1.
- In PD patients overall, serum phosphorus was 7.0 mg/dL prior to SO initiation and fell to 6.2 mg/dL during follow-up. The percentage of patients with serum phosphorus ≤ 5.5 mg/dL rose from 17% to 32%.
- In PD SO monotherapy patients, serum phosphorus fell from 6.8 to 6.1 mg/dL during months 2-4. The percentage of patients with phosphorus ≤ 5.5 mg/dL rose from 26% to 34%.
- In PD dual therapy patients, serum phosphorus was 6.4 mg/dL during months 2 and 3. The percentage of patients with phosphorus ≤ 5.5 mg/dL was 23%.
- In ICHD dual therapy patients, serum phosphorus was 8.0 mg/dL prior to SO initiation and fell to 6.9 mg/dL during follow-up. The percentage of patients with phosphorus ≤ 5.5 mg/dL rose from 26% to 34%.
- In ICHD SO monotherapy patients, serum phosphorus fell from 7.0 to 6.5 mg/dL during months 2-4. The percentage of patients with phosphorus ≤ 5.5 mg/dL rose from 26% to 34%.

Conclusions

- In a real-world population of ICHD and PD patients, conversion to SO was associated with:
  - Reductions in serum phosphorus
  - Higher percentage of patients with controlled phosphorus
  - Lower total PB pill burden

References

2. Reductions in serum phosphorus
3. Higher percentage of patients with controlled phosphorus
4. Lower total PB pill burden

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