EFFECTIVENESS OF SODIUM ZIRCONIUM CYCLOSILICATE IN REDUCING POTASSIUM CONCENTRATIONS IN HOSPITALISED PATIENTS

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BACKGROUND AND IMPORTANCE:
Hyperkalaemia is a common but hazardous complication in patients with Chronic Kidney Disease. Resins are effective in reducing potassium serum levels, but its effectiveness is usually tested according to standard recommendations of shock and maintenance doses. Are these recommendations followed in clinical practice? If not, is it equally effective?

OBJECTIVE:
To evaluate the use and effectiveness of sodium zirconium cyclosilicate (SZC) treatment in routine clinical practice.

MATERIALS AND METHODS:
Observational and retrospective study carried out in a tertiary level hospital that included patients admitted with hyperkalaemia who started treatment with SZC since December 2021. The drug’s technical data sheet recommends a shock dose of 10g/8h for a maximum of 72h until normokalaemia is reached and from there, to establish a maintenance regimen with the minimum dose that allows potassium concentrations between 3.5 -5mmol/L.

RESULTS:
32 patients (17 men, 15 women)
Median age 83 years
Chronic kidney disease in 78% of cases

Dosage
Shock regimen used:
10g/8h
10g/24h
5g/8h
Maintenance regimen used:
5g/24h
10g/24h
5g/48h

Outcomes:
21.38% mean K+ levels reduction
37.5% of patients remained above target after 48h of treatment, half of whom had not received shock doses.

CONCLUSIONS:
A significant percentage of patients did not reach the potassium concentration target after treatment with SZC, which could be related to the lack of shock dose administration. This is in agreement with the available literature which suggests that doses higher than 10g/day lead to a greater potassium reduction.