

Frequency of pruritus symptoms in haemodialysis patients and its relation to various factors

Evgeniya Volodina¹, Tatyana Glushenkova², Cristina Miriunis³, Maria Teresa Parisotto³

NephroCare

¹Fresenius Medical Care, Fresenius NephroCare Dialysis Centre, Saratov-Russia

²Fresenius Medical Care, Fresenius NephroCare Dialysis Centre, Ulyanovsk - Russia

³Fresenius Medical Care, NephroCare Coordination, Bad Homburg - Germany

Introduction

Pruritus is a frequent complication for dialysis patients. This symptom is a cause of serious problem for patients, because often has the character of painful attacks. As a result, pruritus has a negative effect on the quality of life of patients. There are many possible causes of itching, but the main principles of treatment are the adequate dialysis program, strict compliance hypophosphoric diet and pharmacological correction of calcium-phosphorus metabolic disorders.

Objective

To determine the frequency of pruritus and its dependence on HD duration, age, and blood laboratory results.

Methods

232 patients were divided into 2 groups: 56 patients (23%) with itching symptoms and the second group, patients without symptoms.

Results

The results of first group compared to the second one:

Average age is 50 ± 11 years vs 54 ± 12 ;

HD duration is 5.5 ± 4 years vs 5.3 ± 4 ;

Kt/V = 1.60 ± 0.19 vs 1.60 ± 0.18 ;

P > 0.05 for all three above values;

Calcium is $>2.5 \text{ mmol/L}$ in 3.6% of patients (2.25 ± 0.19) vs $>2.5 \text{ mmol/L}$ in 8.5% of patients (2.22 ± 0.17 ; not statistically significant);

Phosphorus is $>1.78 \text{ mmol/L}$ in 50% of patients (1.76 ± 0.47) vs $>1.78 \text{ mmol/L}$ in 28% of patients (1.54 ± 0.46 ; $p < 0.01$);

Parathyroid hormone (PTH) is $>300 \text{ pg/mL}$ in 76% of patients ($>600 \text{ pg/mL}$ in 43% of patients) vs $>300 \text{ pg/mL}$ in 65% of patients ($>600 \text{ pg/mL}$ in 30% of patients ($p < 0.05$)).

Our research revealed that high levels of phosphorus and PTH are the main reasons for pruritus. Duration of the CKD, age, and Kt/V were equivalent in the both groups.

Conclusion

Improving the efficiency of dialysis, dietary compliance, administration of phosphate binders and vitamin D3, calcium-phosphorus balance and optimal level of PTH may reduce skin itching. Continuous patient education on these issues is a crucial point for nurses to enhance the quality of life of dialysis patients.

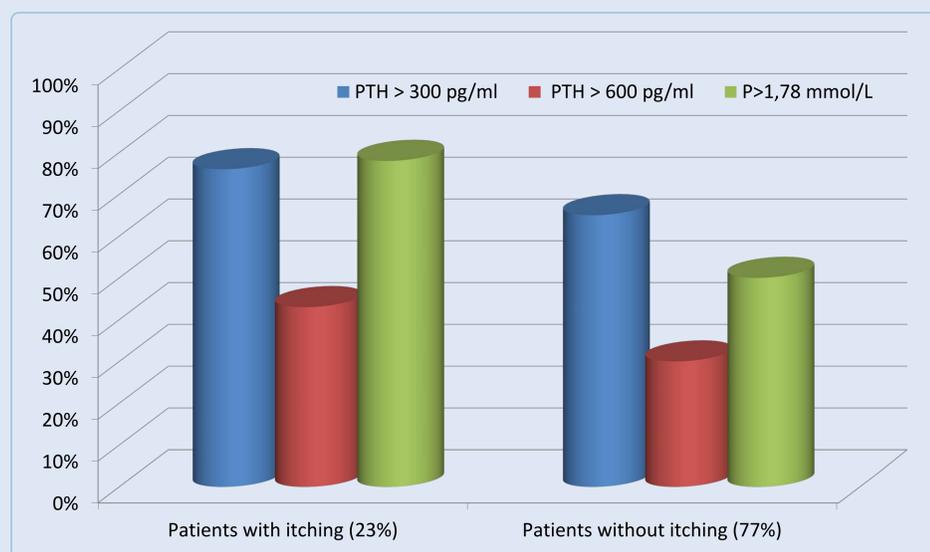


Figure 1: Dialysis Center Saratov, Russia, 2014, biochemical values

