UREMIC PRURITUS IN CHILDREN

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INTRODUCTION

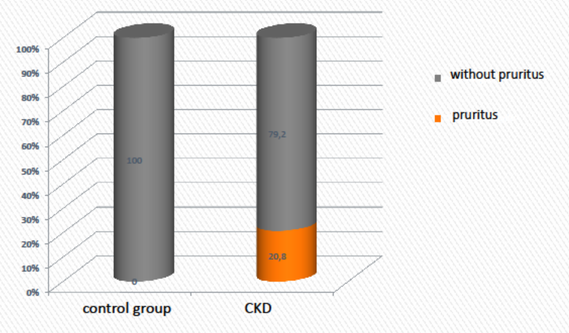
Chronic kidney disease (CKD), regardless of its cause, may be accompanied by various skin lesions. The most common symptom in adults suffering from CKD is pruritus. The literature data on uraemic pruritus in children is very limited. The aim of this study was to evaluate the frequency and severity of pruritus and skin dryness in children with (CKD).

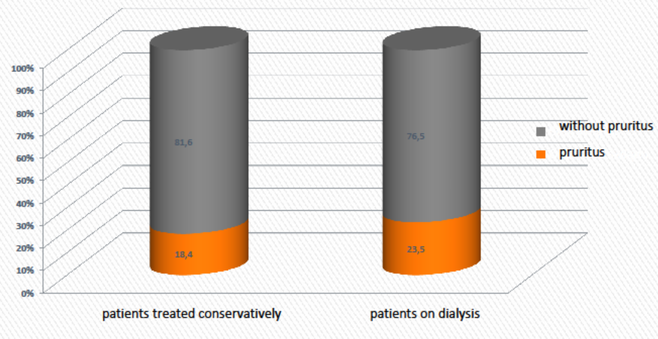
MATERIALS AND METHODS

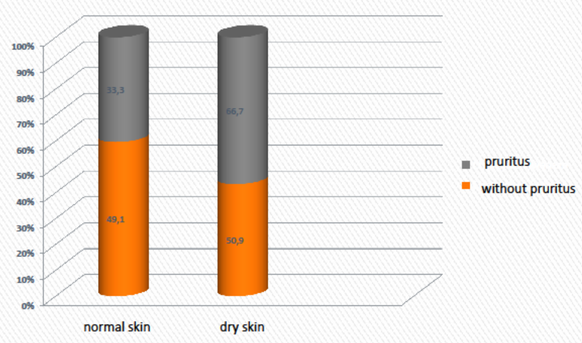
The study included 103 children: 72 with CKD, stage 3-5 (mean age 11.0 ± 4.5 years, range: 4-17) and 31 patients with monosymptomatic primary nocturnal enuresis as a reference group (mean age 10.7 ± 3.9 years, range: 4-17). Among children with CKD there were 34 on dialysis (haemodialysis or peritoneal dialysis) and 38 treated conservatively.
The pruritus was assessed using own survey, a questionnaire assessment of pruritus and a visual analogue scale. Skin dryness was assessed using several tools. Initially the study subjects described the site and severity of this symptom (mild, moderate, severe) themselves. Next, clinical evaluation of skin dryness, non-invasive corneometric assessment of epidermis moisturizing and measurement of transepidermal water loss using tewameter were performed.

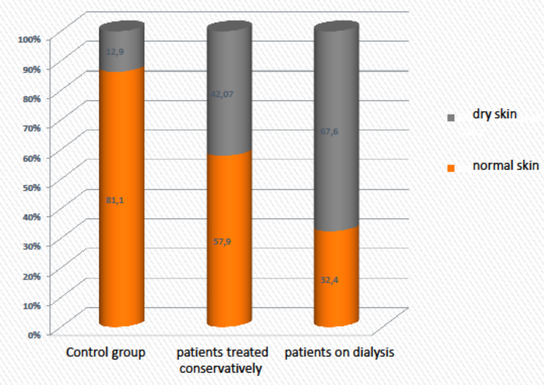
RESULTS

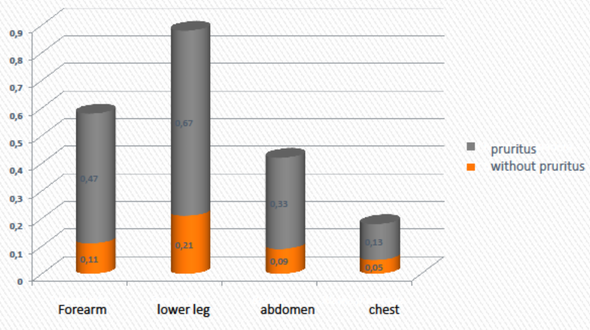
Pruritus in children with CKD was found in 20.8% of cases. In the group of patients treated conservatively pruritus was observed in 18.4% of patients, and among dialysis in 23.5% (p=0.02).
Xerosis was more commonly found in children with pruritus (66.7%) compared to those without pruritus (50.9%) (p<0.01).
The problem of **dry skin** was identified more frequently in patients on dialysis (67.6%) than conservative treatment (42.1%) (p<0.01).
Xerosis was more severe in children with pruritus than without pruritus.



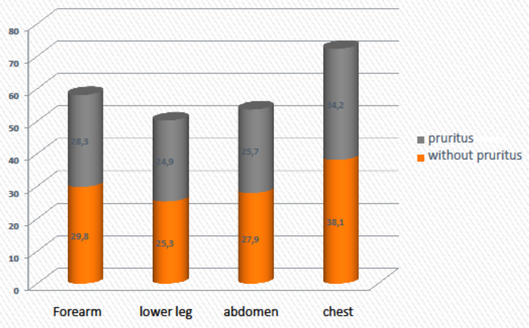








Clinical assessment of dry skin



Assessment of the moisturizing skin by corneometer

Assessment of transepidermal water loss by tewameter

CONCLUSIONS

Dry skin is a major concern of children with CKD, intensifying as the disease progresses. Dry skin may play an important role in pathogenesis of pruritus in children with CKD, which is shown by higher incidence of dry skin and a greater severity in children with pruritus compared to those without pruritus.

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