



A STUDY OF SKIN MANIFESTATIONS IN KIDNEY DISEASES

Dermatology

**Dr. Mohammed
Faizal A**

Assistant Professor, Department of Dermatology, Travancore Medical College, Kollam

Dr. Radhamony. M*

Associate Professor, Department of Dermatology, Travancore Medical College, Kollam
*Corresponding Author

ABSTRACT

A wide variety of skin diseases occur in patients with chronic kidney disease. These diseases are sometimes related to the underlying renal illness but are more frequently directly or indirectly associated with 'uremia' in its broadest sense. With an almost 100% prevalence in dialysis populations, skin disorders are frequently the subject of patients' complaints. Skin disorders associated with chronic kidney disease (CKD) can markedly affect a patient's quality of life and can negatively impact their mental and physical health. Skin involvement can be extensive, and a number of dermatologic disorders may affect ESRD patients. An effort has been put to understand the incidence of different skin conditions in kidney diseases.

KEYWORDS

Kidney Disease, Skin Condition, Pigmentation

Introduction:

Skin disorders associated with kidney disease can markedly affect a patient's quality of life and can negatively impact their mental and physical health. A wide variety of skin diseases occur in patients with chronic kidney disease.^{1,2} These diseases are sometimes related to the underlying renal illness but are more frequently directly or indirectly associated with 'uremia' in its broadest sense. With an almost 100% prevalence in dialysis populations, skin disorders are frequently the subject of patients' complaints.³ Skin disorders associated with chronic kidney disease (CKD) can markedly affect a patient's quality of life and can negatively impact their mental and physical health. Skin involvement can be extensive, and a number of dermatologic disorders may affect ESRD patients.⁴ As the number of dialysis patients continues to grow, providers in all areas of medicine will be involved in their management. Dermatologic complaints in ESRD patients are common and carry significant morbidity and mortality. Although a number of dermatologic conditions affect these patients, perhaps the most troublesome are pruritus, Kyrle's disease, NFD, and CUA. Therapeutic interventions are available, but their efficacy is limited. Therefore, it is necessary to recognize these conditions early and work closely with a dermatologist in managing these patients. An effort has been put to understand the incidence of different skin conditions in kidney diseases.

Aims and Objectives:

To study the Skin manifestations in Kidney Diseases.

Materials and Methods:

This study is done in the Department of Dermatology, Travancore Medical College, Kollam.

This study was done from oct 2015 to sept 2017.

The study was conducted in thirty patients and the skin conditions were noted.

INCLUSION CRITERIA: Patients with dermatological manifestations and with Kidney Disease any stage.

EXCLUSION CRITERIA: Prior skin manifestations before being diagnosed as Kidney Disease

Results:

Table 1: Mean age of the Patients

Patients	Mean age	Standard Deviation
30	52.11	10.33

Table 2: Total Number of Patients who developed complications

Patients	Incidence	Percentage
30	27	90 percent

Table 3: Table of Significance

Patients	X-Value	P-Value (<0.05)
12	0.672	0.007

This is significant.

Table 4: Skin Manifestations:

Skin Manifestations	Frequency
Hyperpigmentation	9
Prurigo nodularis	6
Pruritus	21
Pallor	19
Xerosis Ichthyosis	1
Splinter hemorrhages	3
Alopecia	20
Subungual hyperkeratosis	1

Discussion:

Envisages in elaborating all the skin manifestations in CKD patients. Skin disorders are a common problem in patients with CKD and can seriously affect the patient's physical and mental health and thus their quality of life. A basic knowledge of the most common dermatological entities encountered in CKD will enable renal physicians to optimize daily patient care and to recognize potentially life-threatening conditions. Recent surveys (including the Dialysis Outcomes and Practice Patterns Study [DOPPS], which has assessed more than 18,000 patients) reveal that UP is still present in 42–52% of adults with CKD. Our study shows pruritus being the most common manifestation amounting up to 86% of the study cohort. The incidence of CUA is estimated to be approximately 4% in patients on dialysis and less than 1% in patients with CKD.^{8,9} Our study shows CUA being amounting up to 14% of the study cohort being affected by this symptom. Acquired perforating dermatitis (APD, also known as Kyrle disease) has a prevalence of approximately 10% in dialysis populations and occurs predominantly in African Americans and patients with diabetes mellitus.^{5,6,7} Our study shows APD amounting up to 13% of the study cohort being affected by this symptom. As the number of dialysis patients continues to grow, providers in all areas of medicine will be involved in their management. Dermatologic complaints in ESRD patients are common and carry significant morbidity and mortality. Although a number of dermatologic conditions affect these patients, perhaps the most troublesome are pruritus, Kyrle's disease, NFD, and CUA. Therapeutic interventions are available, but their efficacy is limited. Therefore, it is necessary to recognize these conditions early and work closely with a dermatologist in managing these patients.

Conclusion:

Therapeutic interventions are available, but their efficacy is limited. As the number of dialysis patients continues to grow, providers in all areas of medicine will be involved in their management. Dermatologic complaints in ESRD patients are common and carry significant

morbidity and mortality. Although a number of dermatologic conditions affect these patients, perhaps the most troublesome are pruritus, Kyrle's disease, NFD, and CUA.

References:

1. Patel TS et al. (2007) an update on pruritus associated with CKD. *Am J Kidney Dis* 50: 1120.
2. Avermaete A, Altmeyer P, Bacharach-Buhles M. Skin changes in dialysis patients: a review [Editorial]. *Nephrol Dial Transplant* 2001; 16:2293–6.
3. Gilchrist BA, Rowe JW, Mihm MC Jr. Clinical and histological skin changes in chronic renal failure: evidence for a dialysis-resistant, transplant-responsive Microangiopathy. *Lancet* 1980; 2:1271–5.
4. Murphy M, Carmichael AJ. Renal itch. *Clin Exp Dermatol* 2000; 25:103–6.
5. Lugon JR. Uremic pruritus: a review. *Hemodial Int* 2005; 9:180–8.
6. Janigan DT et al. (2000) Calcified subcutaneous ("calciphylaxis") in chronic renal failure. *Am J Kidney Dis* 35: 588–597.
7. Wilmer W et al. (2002) Calciphylaxis: emerging concepts in prevention, diagnosis, and treatment. *Semin Dial* 15: 172–186.