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2021

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A 10-YEAR RETROSPECTIVE COHORT STUDY ON DERMATOLOGICAL CONDITIONS IN RENAL TRANSPLANT RECIPIENTS AT THE CHARLOTTE MAXEKE JOHANNESBURG ACADEMIC HOSPITAL, 2008-2018.

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Medicine in Dermatology.

Johannesburg 2021

ABSTRACT

Introduction

Dermatological conditions are common in renal transplant recipients as a consequence of chronic immunosuppression. Awareness of these conditions is important to dermatologists as their presentations may be atypical, and their occurrences affect the overall well-being of renal transplant recipients.

Aim of study

To describe the spectrum of dermatological conditions observed in renal transplant recipients at Charlotte Maxeke Johannesburg Academic hospital between January 2008 and December 2018.

Methods

A retrospective cohort study was performed. All participants aged 18 years and above that received a renal allograft and were followed up at the Renal unit in Charlotte Maxeke Johannesburg Academic Hospital, between January 1, 2008, and December 31, 2018, were recruited. A descriptive analysis of the data was performed. Continuous data were summarised as mean (standard deviation), and median (interquartile range), and categorical data as frequencies and proportions. A test of statistical significance was computed at p less than 0.05. All analyses were performed with Stata Release 15.1.

Results

Of all the renal transplant recipients in the study (n=173), 69% developed dermatological conditions during the study period. Twenty-two percent of the dermatological conditions were viral infections; 17% were fungal infections 6% were bacterial infections; 6 % were cutaneous neoplasms, and 17% were adverse drug reactions. Twenty-nine participants had more than one condition. There was a statistically significant difference in dermatological conditions for participants who had infection prophylaxis for six months versus greater than six months, p = .025. There was no statistically significance difference in dermatological conditions for gender, age, race, aetiology of end-stage renal disease, organ donor type, and type of immunosuppressant drug. There was a trend to more cases of viral infections in

males, participants less than 50 years, and participants of African descent but a statistical test of significance was not performed because of small sample size. The median time to develop dermatological conditions was two years.

Discussion

The prevalence of dermatological conditions in this study is 69%. The majority of these conditions appear to occur between one year to two years following renal transplantation suggesting this may correspond to peak of immunosuppression.

Conclusion

This study shows that dermatological conditions are common in renal transplant recipients. This study also appears to suggest that majority of these dermatological conditions are cutaneous infections and occur at peak of immunosuppression. It is important that patients are aware of these conditions and follow appropriate preventive strategies. It is even more pertinent that dermatologists collaborate with nephrologists in the surveillance and appropriate management of these conditions.