

P214

## P214 -Cutaneous Malignancies in Renal Transplant Recipients - an analysis of 296 patients in “Sunny Cornwall”

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### Introduction:

Cutaneous malignancies are common in renal transplant recipients (RTR). The overall incidence of these malignancies is higher in renal transplant recipients compared to the general population. The most common malignancy is squamous cell carcinoma (SCC) and one of the most important risk factors is Ultraviolet light exposure. Cornwall is one of the sunniest areas in the United Kingdom (UK). We decided to estimate the burden of cutaneous malignancies in this patient population, determine associated risk factors and compare data with previous studies in the UK.

### Methodology:

A retrospective study in which RTR followed up at renal transplant clinics between 1988 and 2016 were considered. The minimum follow up required was 12 months. Demographic variables, number of renal transplants, type and number of skin cancers, type of immunosuppression and interval between transplant and skin cancer were recorded. Statistical analyses were performed with SPSS Statistics 22.0® (IBM Corp., Armonk, NY, USA). Descriptive statistics were defined as mean and standard deviations. Survival analyses were performed with the Kaplan-Meier method. A P value  $\leq 0.05$  was considered statistically significant.

### Results:

343 patients were considered and 47 were excluded because of missing information on transplant date, or date/type of skin cancer. 296 underwent final analysis. 185/296 patients were male (62.5%). The median age was 56 years IQR (44.00 – 65.70). The median follow up (total duration of immunosuppression at analysis) was 70 months IQR (36.30 -126.80). 224 (75.7%) patients had deceased donors, 54 (18.2%) living donors, and 18 (6.1%) had a simultaneous pancreatic transplant. The number of patients who developed skin cancers was 48 (16.2%). The total number of skin cancers was 57. The median time interval from transplant to cancer was 52 months IQR (26.0 – 139.50). SCC occurred in 36/48(75%) patients; of those, 30/48(62.5%) developed SCC as the first cancer. Basal cell carcinoma (BCC) occurred in 18/48 (37.5%) patients. On Univariate analysis skin cancer occurrence was associated with female gender, deceased-donor transplant, a significantly higher median age, longer duration of immunosuppression and > 1 renal transplant ( $p < 0.05$ ). Azathioprine use was also associated to skin cancer occurrence (HR 6.04, 95% CI 1.59-22.93,  $p = 0.02$ ).

### Discussion:

The incidence of cutaneous malignancies in this cohort of RTRs was 16.2%. The most common malignancy was SCC followed by BCC. Skin malignancies were more common in people with longer durations of immunosuppression and more transplants, deceased donors, female patients and those on azathioprine. The incidence of skin cancers in this study was slightly greater than in previous UK studies. Our study results also suggest that regular long-term skin surveillance may be useful for timely diagnosis and treatment of skin cancers in these patients.