

Recurrent urinary tract infection among renal transplant recipients: risk factors and long term outcome

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OBJECTIVES

Urinary tract infection (UTI) is the most common type of bacterial infection contracted by recipients of renal allografts and may have an adverse impact on graft and patient's survival. We aimed to evaluate the risk factors of recurrent UTI in renal transplant recipients, and its impact on patient and graft survival.

METHODS

An eighty six per cent of 1019 patients (who were transplanted between 2000 to 2010 in Hamed Al-Essa organ transplant center of Kuwait) developed at least one episode of UTI however; only 6.2% patients had recurrent UTI. We compared the patients who had recurrent UTI (group 1) and those who had no or non-recurrent UTI (group 2) against their risk factors.

RESULTS

Patients of group 1 were significantly younger than those of group 2 (34.9 ± 23 vs. 42.8 ± 16 year, $p < 0.001$ respectively), with female preponderance ($p < 0.001$). The percentages of thymoglobulin induction (21.5%) were significantly higher in group 1. Patients with pretransplant urological problems experienced significantly more recurrent UTI ($p < 0.0001$). Hepatitis C patients were significantly more prevalent among group 1 (10.8% vs. 3.8%, $p = 0.008$). Long term graft outcome (functioning, failed and lost follow up) were 78.5%, 21.5 and 0% vs. 84.5, 13.9 and 1.2% respectively ($P = 0.18$). The patient outcome (live, dead and lost follow up) were 73, 1.6 and 25.6% vs. 62.1, 0.3 and 33.6% respectively ($P = 0.187$).

CONCLUSIONS

Adult age, female sex, thymoglobulin induction, pretransplant urological problems and hepatitis C infection were considered risk factors of recurrent UTI among our renal transplant recipients. However, recurrent UTI did not adversely impact graft or patient survival.

