

Opportunistic infection of renal allograft in renal transplant recipients

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Introduction:

Potent immunosuppressive regimen have reduced risk of graft loss due to acute rejection but have increased risk of infectious complications. Infections are now considered to be the second leading cause of death in renal allograft recipients after cardiovascular complications. Urinary tract infection (UTI) is considered to be the most common infection following renal transplantation. BK polyoma virus nephropathy is considered most important viral infection causing allograft failure. There is paucity of literature regarding spectrum of opportunistic infection affecting the renal allograft itself.

Materials and Methods:

Retrospective study from December 2011 to December 2021. Renal graft biopsies and graft nephrectomy performed during this period were retrospectively analyzed for presence of bacterial, viral and fungal opportunistic infections. Epidemiological, clinical details and laboratory workup including microbiological investigations for these patients were retrieved from electronic records.

Results:

A total of 2019 renal transplants were performed during study period. 47 episodes of renal opportunistic infections were diagnosed in allograft biopsies or graft nephrectomy specimen of 47 renal allograft recipients. Table 1 shows details of these infections. BK virus nephropathy was the most common infection followed by graft pyelonephritis. Mucor was most common fungal infection. On follow up, 14 patients died, 17 became dialysis dependent and only 13 had stable graft function.

	Total cases of Renal opportunistic infections N= 47
Age	44.59±13.72 years
Gender	39 males 8 females
Serum Creatinine at biopsy	1.85±0.30 mg/dl
Mean eGFR at biopsy	47.06±10.48 ml/min/1.73 m ²
BK virus	22
CMV	2
Bacterial graft pyelonephritis	12
Granulomatous interstitial nephritis	2 (tubercular) 1 (E.coli)
Mucor	3
Aspergillus	2
Candida	2
Cryptococcus	1

References:

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