Introduction

Renal transplantation is the golden method for management of end-stage renal disease and Kidney transplant recipients have a higher quality of life and consume fewer health care resources compared with patients on dialysis ***(Yoo et al., 2009).***

Rejection is one of the most important complications affecting the transplanted kidney. Different forms of rejection are recognized: hyperacute, acute, and chronic besides borderline and subclinical rejections. Each has its reasonably distinctive changes ***(Sabek et al., 2002).***

Acute rejection typically occurs 5 to 7 days post transplantation, but it can occur at virtually any time after this. The highest incidence of acute rejection is within the first 3 months, and overall rates of rejection vary from 10 to 50 % within the first 6 months depending on HLA matching and immunosuppressive protocol ***(Racusen et al., 1999).***

Acute rejection in renal transplantation is considered a risk factor for short-term and long-term allograft survival. Since the first successful renal transplant in 1954, immunosuppression protocols have evolved to achieve graft and patient survivals > 90% in the first post-transplant year. Most of this success is related to reduced rates of both acute rejection episodes and delayed graft function ***(Hariharan, 2001).***

The standardization of transplant recipients' selection, improvement in the care of post- transplant complications and new immunosuppressants have

increased early graft survival but the long term results remain unchanged ***(Chakkera et al., 2009).*** However, there is growing evidence that molecular mechanisms, histological types, time post transplantation and clinical course of an acute rejection episode play a role in determining the longer term consequences ***(Nashan, 2009).***

Most of the published studies were conducted in cadaveric donor transplant recipients. In view of which we are carrying out this retrospective study on live-donor transplant recipients performed, taking into consideration the different pathological grades and types of rejection, time of rejection, different induction therapies, maintenance immunosuppression protocols and antirejection treatment in addition to other variables that could be relevant.