

Summary and Conclusion

The goal when treating patients with end-stage renal disease is to increase patient survival and provide a better quality of life and this could be achieved by kidney transplantation. Acute rejection is one of the most serious complications which face the nephrologists post-transplantation.

This work was designed to study the impact of first acute rejection episode during the first year post-transplantation on the graft outcome through comparison between patients who experienced the first acute rejection episode during first year post-transplantation (rejection group) their number was **927** patients, and the control group who did not experience any acute rejection episode during the first year, their number was **858** patients among living donor transplant recipients in the Urology and Nephrology Center, Mansoura University in 1976 to 2005 (1785 patients).

In our study we founded that:

- 1-** Five years graft and patient survival in the rejection group is significantly lower than control group.
- 2-** Long term graft and patient survival in the rejection group is significantly lower than control group.
- 3-** Shorter the time of first acute rejection episode to transplantation, higher the graft and patient survival in the rejection group.
- 4-** Higher the number of acute rejection episodes, lower the graft and patient survival.

- 5- Age of recipients, consanguinity, prior blood transfusion and HLA and DR matching and immunosuppression protocol are important predisposing factors for early development of first acute rejection episode post- transplantation.
- 6- Patients who developed their first acute rejection episode during the first year post-transplantation are more prone to post-transplantation complications such as ATN, post-transplant HTN, medical infections and chronic rejection.

So, we can conclude that the time to first acute rejection episode post transplantation and frequency of the rejection episodes have an independent impact on short and long term graft, patient survival. Also, meticulous monitoring of the patients clinically, laboratory, radiologically, immunosuppression protocols and drug level follow up is crucial for patient and graft safety.