

# Study Of Clinical Profile Of Post Renal Transplant Infections During First Year After Transplant-a Single Center Study



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# INTRODUCTION

Kidney transplantation is the leading therapy for end-stage renal disease, significantly advancing since the 1950s. Improvements in surgical techniques, immunosuppressive drugs and infection control have enhanced patient and graft survival. Despite these advancements, infections remain a significant concern, with incidences ranging from 15-44% and mortality rates below 5% in developed countries. However, in developing countries, it is estimated that infections complicate 50-70% of transplants, leading to high morbidity and mortality.

This study investigates the prevalence, timing, and outcomes of infections within the first 12 months post-transplant in 430 patients at IKDRC, Ahmedabad, India. It aims to identify risk factors, causative agents and the impact of infections on graft function, morbidity, and mortality.



# METHODS

- 430 kidney transplant recipients (deceased donor or live-related) at IKDRC, Ahmedabad, India followed over a one-year period post-transplant
- All the patients were studied for a period of first 12 months after renal transplant for occurrence of infections, its management and course.
- Infections occurring beyond one year were excluded.

## Follow-up & Data Analysis:

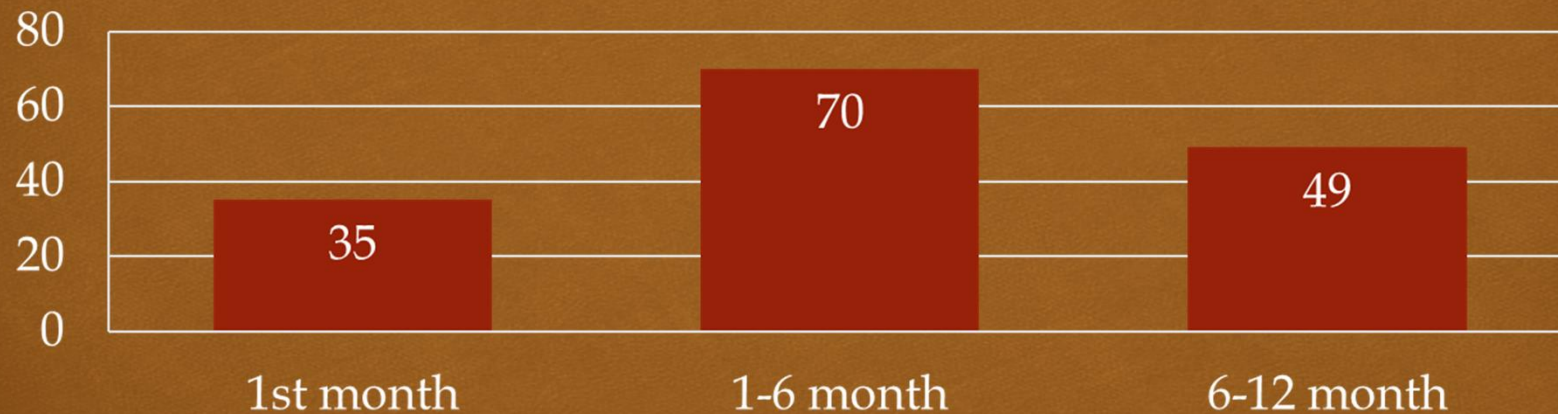
- Follow-up weekly during first month, fortnightly until the third month and monthly until the twelfth month.
- Whenever a patient developed any complaints or symptoms of infection.
- Analyzed for type of induction agents used, current immunosuppressant drugs, number of rejection episodes and residual graft dysfunction.
- Statistical analysis performed using SPSS17 software
- P value was calculated using Fisher's exact t test and chi square test. (P<0.05 was considered statistically significant)



# RESULTS

- Total 131 Recipients developed 154 episodes of infections; with overall prevalence rate of infection 35.8% during 1st year post transplant.

## Number Infection episodes



■ Infection    ■ Not-infected

74%

58.20%

ATG

26%

41.80%

Basiliximab

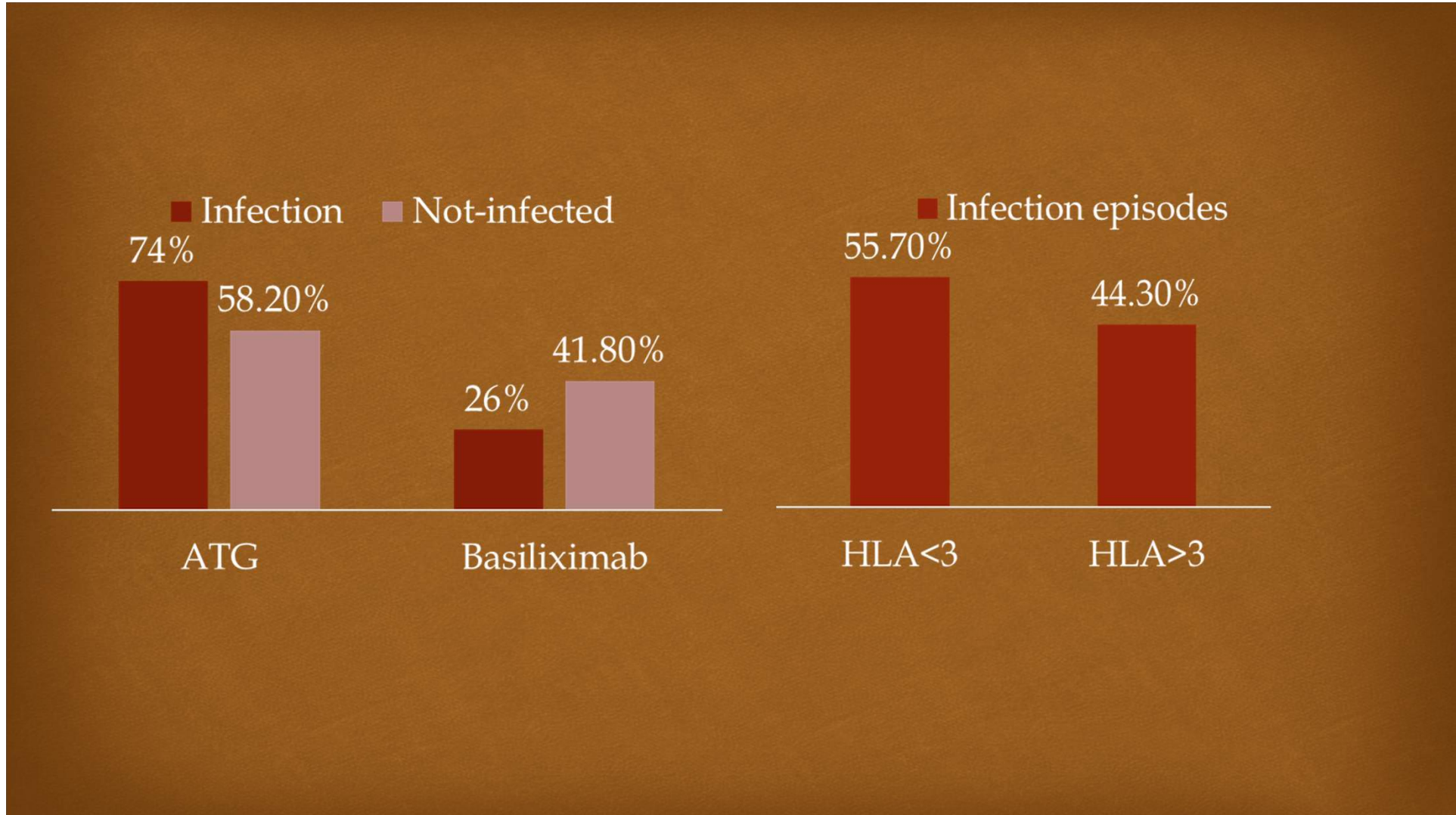
■ Infection episodes

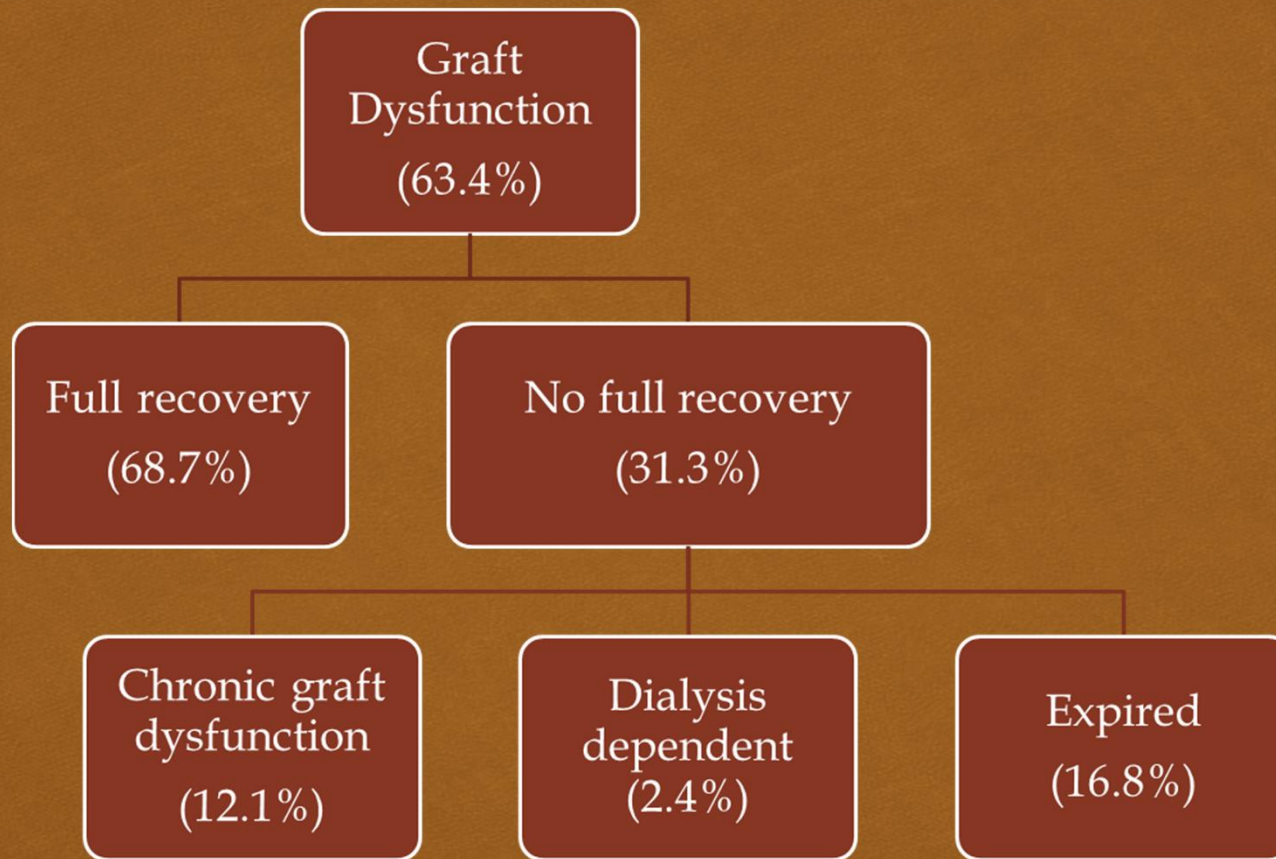
55.70%

44.30%

HLA<3

HLA>3







# CONCLUSIONS

- In conclusion, occurrence of infections following renal transplant is a common complication. Post renal transplant infection significantly increases morbidity and mortality among KTR.
- Use of ATG was significantly associated with development of infection.
- Poor HLA match increases chance of getting infection.