

Comparison of Various Induction agents in Low risk kidney transplantation – A single centre experience

Dr Girish Namagondlu¹, Dr Deepak Chitralli¹, Ms Binita Chauhan¹, Dr Shyam Sundar¹, Dr Ravindran Thamarai Kannan¹, Dr Madhusudhan Raju¹, Dr Arun David¹, Dr Sudhakar Shanmugam¹, Dr Ajit Huilgol¹

¹*Columbiaasia Hospital, Bangalore, India*

Introduction

Ideal induction agent in low risk kidney transplant is a subject of debate. Recent evidence has shown that no induction is probably as good as any induction agent in low risk group. Cost and affordability of induction agents are a real challenge in developing countries like India. Judiciously using or avoiding induction agents safely where possible makes a significant impact in such scenarios.

Aim

A single centre retrospective study to compare complication rates, renal graft and patient survival at 6 months with no induction and different induction regimens in low risk kidney transplantation

Material and Methods

We performed a retrospective study patients who underwent live kidney transplant between 2015-2018. One group received no induction, another group received basiliximab (simulect) 20mg, Anti T-Lymphocyte Globulin (Grafalon, ATLG) 3-5mg/kgBW or ATG (Thymoglobulin) 1-3mg/kg as Induction agent. Maintenance regimen was standard dose tacrolimus, mycophenolate mofetil and prednisolone.

Results

15 received No induction, 23 Grafalon, 12 Simulect and 22 Thymoglobulin. In no Induction group mean age was 37.3yrs with mean 6m s.creat of 1.3 . Grafalon group Mean age 41.5yrs (range 19-64) with 17 males. Mean S.Creat at 6months was 1.37 (0.7-2.4), eGFR-72ml/min)

Basiliximab Group Mean age 48yrs (range27-70) with 11 males in this group. Mean S.Creat at 6 months of 1.3 (eGFR-66.2ml/min), ATG (Thymoglobulin group) Mean age was 43.8 (range 29-57) with 19 males in this group, and all were 1 st transplant. Mean s.creat at 6months of 1.3 (eGFR-66.2).

Discussion

There was no statistically significant difference in complication rates, renal graft outcomes or survival amongst the groups. Choice of induction agent may not significantly alter complication rates in the first 6 months post transplant in low immunological risk group. No induction group had similar results to induction group and might be a safe and cost effective strategy.