



# MAGNITUDE OF NEW ONSET DIABETES MELLITUS AFTER TRANSPLANT (NODAT) AMONG RENAL TRANSPLANT RECIPIENTS AT KING FAHAD SPECIALIST HOSPITAL-DAMMAM (KFSH-D), SAUDI ARABIA

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## INTRODUCTION AND AIMS

NODAT has been reported to occur in 4%-25% of renal transplant recipients. The development of NODAT has also been shown to be associated with an adverse impact on patient survival and an increased risk of graft rejection and graft loss, as well as an increased incidence of infectious complications. NODAT may be more common among Saudi patients as Type 2 Diabetes Miletus (DM) is highly prevalent in Saudi population, with rates close to 30%. Multi-organ Transplant Center (MOTC) at KFSH-D is relatively new. Our Study aims to describe the incidence rates of NODAT and important factors associated with it.

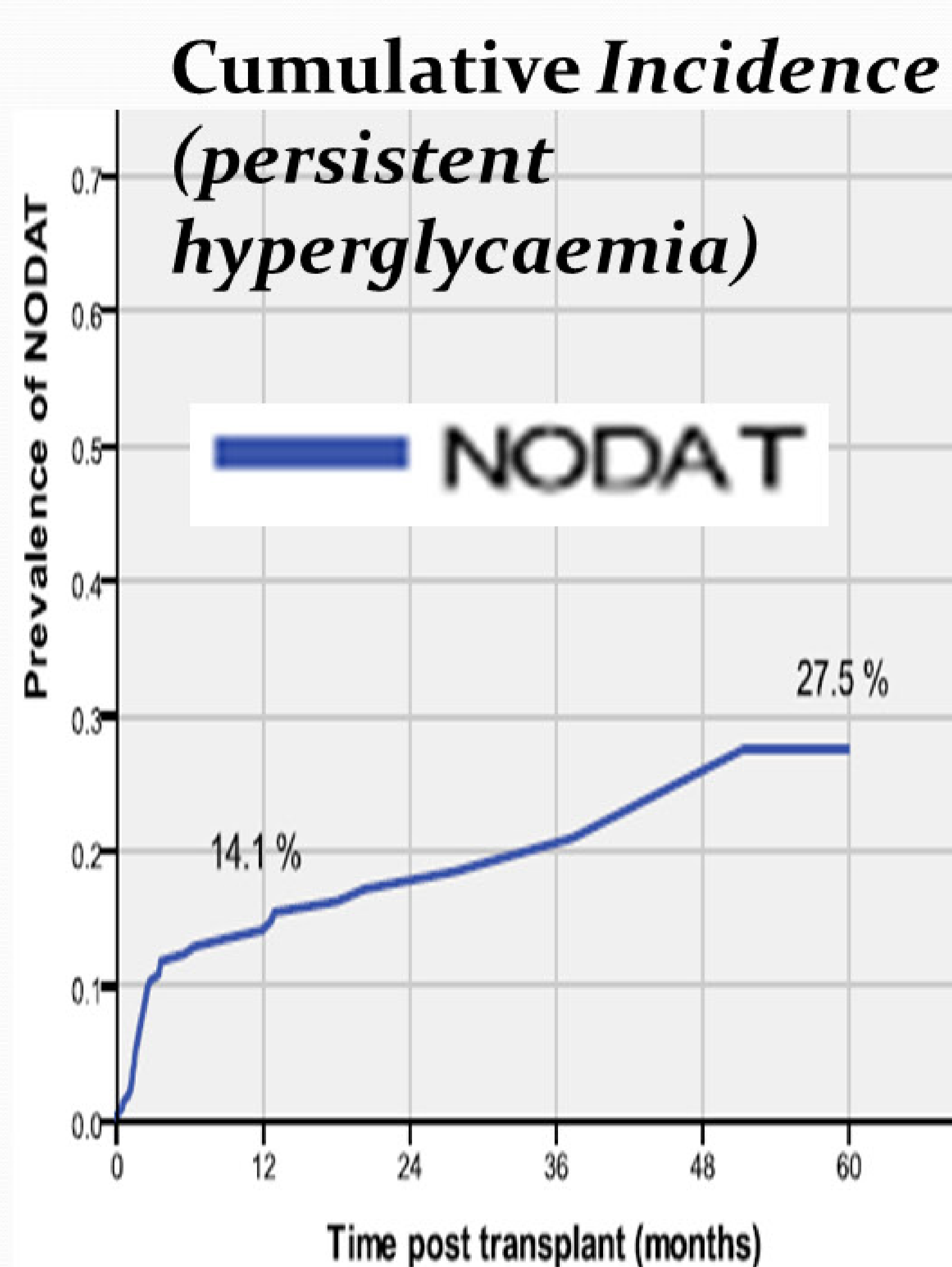
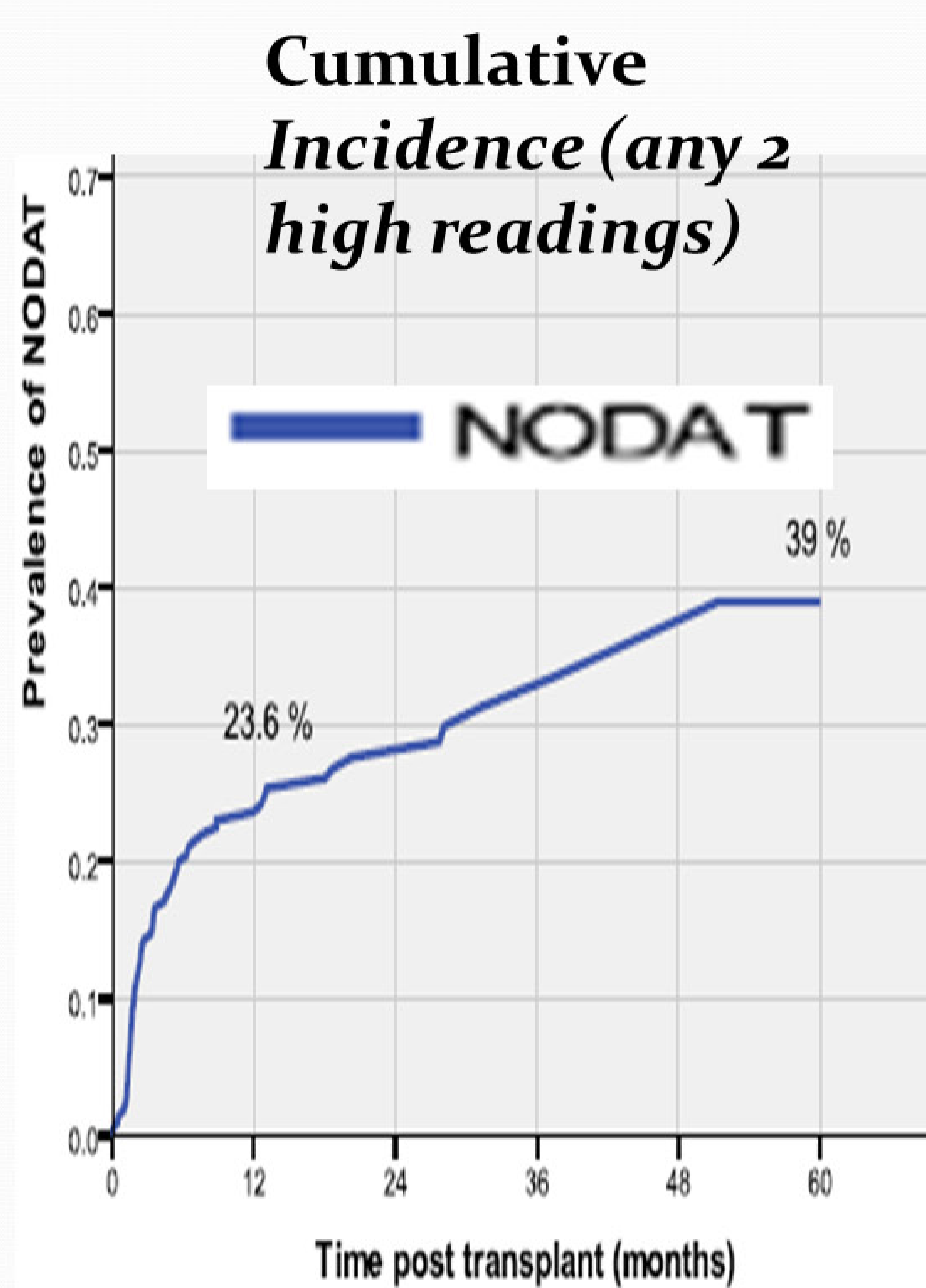
## METHODS

We conducted a retrospective analysis of data from all kidney transplant recipients in our centre between September 2008 and May 2013. Out of 311 patients, 93 with DM before transplantation were excluded, leaving 218 patients as our study population. NODAT defined by the WHO definition for DM as per the 2003 consensus: any 2 readings of Fasting Blood Sugar (FBS) > 7mmol/l or Random Blood Sugar (RBS) > 11 or the use of hypoglycaemic medications after first post transplant month.

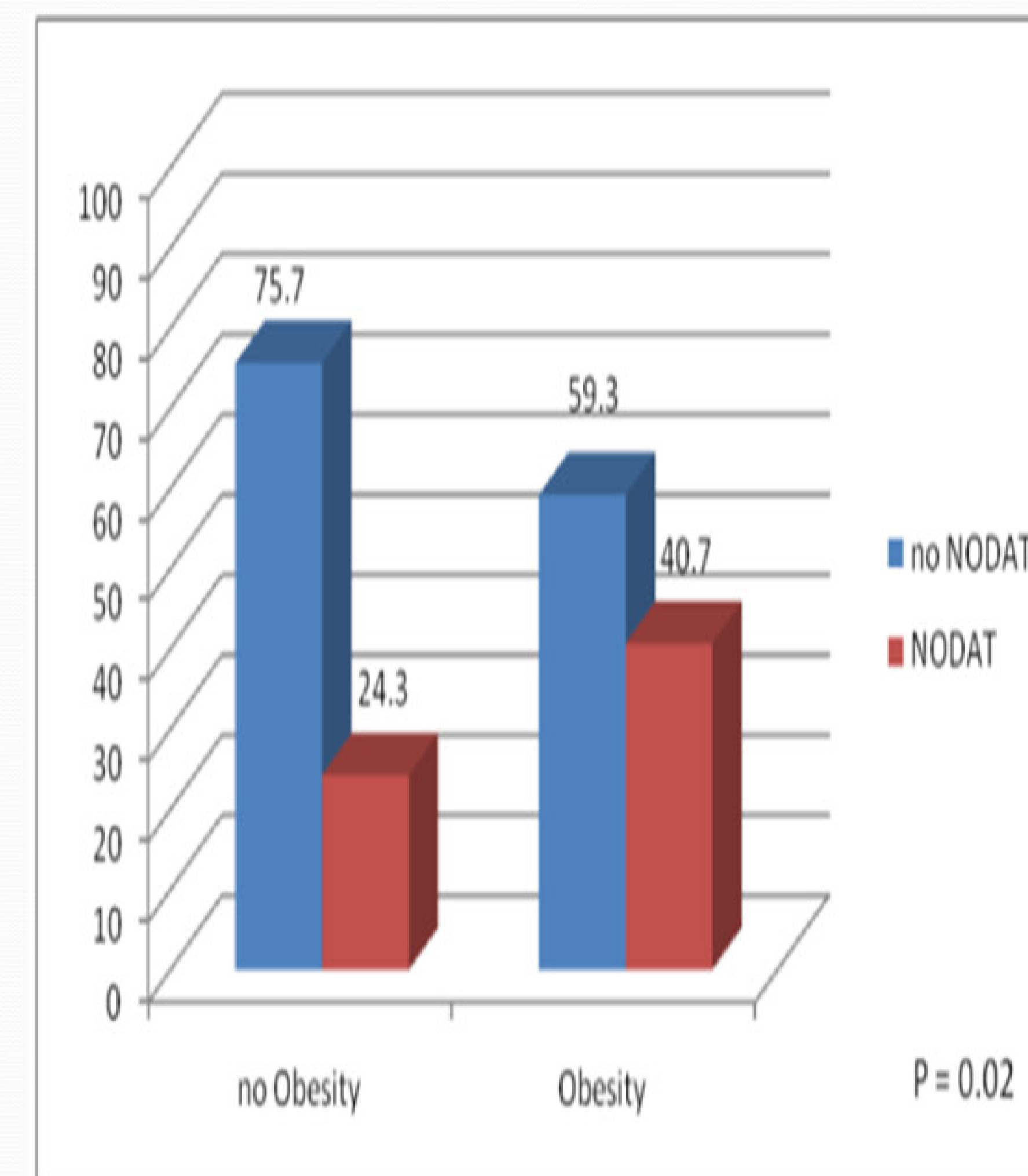
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## RESULTS Baseline Characteristics

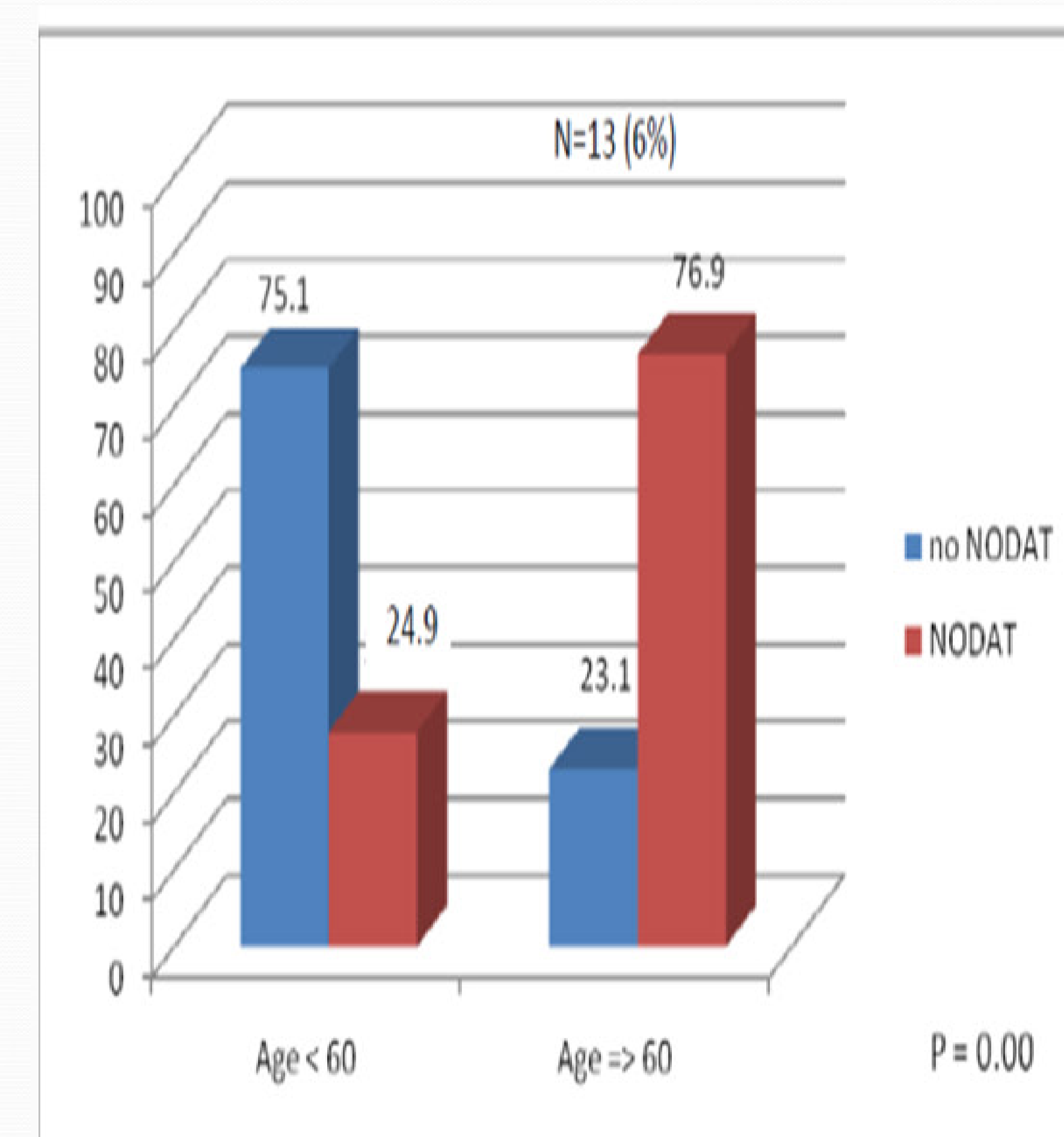
Variable	Number Total: 218	Mean +/- STD Range	Percentage %
Age		36 +/- 14 Range 15-76	
Recipient Gender:			
Male	121		55.5%
Female	97		44.5%
Donor Source: Living Related (LR)	150		69%
Deceased Donor (DD)	68		31%
Donor Gender	Male		82.5%



## RESULTS NODAT & Obesity



## NODAT & Age



## DISCUSSION

40% of our NODAT cases has sporadic high FBS with normal readings in between.

- Graft loss and mortality are not affected by NODAT because of short follow up.
- Obesity is risk factor in our study population

## CONCLUSIONS

Cumulative incidence of NODAT at one year 14.1% with significant association with obesity and old age not different from what have been reported in the literature. No significant association was found with donor source, HCV infection, rejection, mortality or graft survival. Larger prospective and multi centre studies are needed.

