

Early peri-operative hyperglycaemia and renal allograft rejection in patients without diabetes

ABSTRACT

The association between hyperglycaemia and an increased risk of allograft rejection is consistent with findings in patients with diabetes. We propose a causal link that is congruent with both epidemiological and in vitro studies and suggest that additional clinical research is necessary.

INTRODUCTION

The prevalence of type 2 diabetes is estimated to be as high as 12% in the US.

A recent study showed that patients with type 2 diabetes had a higher risk of renal failure than non-diabetic patients with the same age, race, sex and BMI.

Type 2 diabetes is a chronic disease and the risk of renal failure is increasing in the elderly population.

A study conducted in South Africa showed that patients with type 2 diabetes had a higher risk of renal failure than non-diabetic patients with the same age, race, sex and BMI.

The potential complications of hyperglycaemia and renal allograft rejection include:

- Severe renal failure

- Renal failure and death

- Hepatic failure and renal failure

If you have Following renal transplantation, hyperglycaemia is a common outcome. Dialysis patients also have diabetic patients, and the standard post-transplant management is diabetogenic. Recent data has shown that allograft rejection is more likely to occur after kidney transplant surgery. We have recently described how glycaemic control correlates with allogeneous rejection in patients with diabetes. This relationship may be causally linked to acute hyperglycemia, which may cause inflammation or increased risk of IGF in some patients.

CONCLUSION

Remarkable conclusions Early hyperglycaemia, regardless of whether they are diabetic or not, has been shown to increase the risk of allograft rejection, as have other studies by us. Although hypercrystallism is not the only risk, it is highly common and highly susceptible to intervention. There are also good reasons why sugars should be tightly controlled after transplantation in those with diabetes. Preventing early hyperglycemic insulin resistance may also help reduce allograft rejection and decrease rejection episodes in non-diabetic patients.