

# NEED FOR INSULIN THERAPY EARLY AFTER PANCREAS (SIMULTANEOUSLY WITH KIDNEY) TRANSPLANTATION



Zibar L.<sup>1,2</sup>, Pavičić Šarić J.<sup>1</sup>, Bačak Kocman I.<sup>1</sup>, Jureković Ž.<sup>1</sup>

<sup>1</sup> University Hospital Merkur, Zagreb, Croatia

<sup>2</sup> Faculty of Medicine, University Josip Juraj Strossmayer in Osijek, Osijek, Croatia

## Introduction

Pancreatic transplant is expected to establish its endocrine function right after transplantation (TX). However, some patients need insulin during the first days after TX.

## Aim

To examine frequency and duration of need for insulin early after pancreas (simultaneously with kidney) transplantation (TX), and its relation to pancreatic transplant and patient survival at 1 year after TX.

## Patients and methods

We examined all 21 patients (15 men and 6 women, median age 39 years, 30 – 56, interquartile range 34 – 45) that underwent simultaneous pancreas and kidney TX in University Hospital Merkur in Zagreb, Croatia, during the 5 year period (1 Sept 2018 – 31 Aug 2023). All of them previously suffered from diabetes type 1. Data were taken from medical records.

## Results

Five of 21 patients needed insulin during the first days (2, 4, 5, 7 and 17 days, resp.) after TX. Two female patients lost pancreatic transplant 2 and 1 month after TX, resp., the first did not need insulin after the TX, while the other one needed insulin for 17 days after the TX. They both lost the transplant due to pancreatic graft necrosis, but only once after already establishing endocrine pancreatic function. Patient survival at 1 year was 100 % (considering 8 censored patients transplanted less than 1 year ago).

### CHARACTERISTICS OF SPKT PATIENTS (N = 21)

Age (years)	Median 39 (IQR 34 – 45)
Males : females (n)	15 : 6
Need for insulin after SPKT (n)	5/21 (up to postTX day 2, 4, 5, 7, 17, resp.)
Patient survival at 1 year postTX (n)	21/21
Pancreatic graft survival at 1 year postTX (n)	19/21 (2 graft losses due to pancreatic graft necrosis: in 1 patients that needed insulin after TX and in 1 that did not need it)

## Conclusion

Around 1/5 of patients needed insulin after pancreas (simultaneously with kidney) TX within a week after TX (except of one patient who needed it longer). We can't conclude that it affected pancreas transplant or patient survival at 1 year after TX, however, more patients are needed for final evidence.