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PART IV
TRANSPLANTATION TODAY AND TOMORROW

Incidence of Fistulas Following Human Pancreas Transplantation—Positive Influence of Reabsorption of Pancreatic Secretions by the Peritoneum

W-D. Illner, Th. Gottwald, D. Abendroth, and W. Land

THERE IS EVIDENCE suggesting that transplantation of the pancreas is the only approach to a curative treatment of type I diabetes.[1-3] The results of this surgical method improved during the last years with the new agent cyclosporine (Cs) and better patient management. In 1982 the one-year-survival-rate of pancreas grafts was about 20% worldwide, whereas in 1984 it had risen to 38%.[4] In spite of this improvement, pancreas transplantation is still less successful than transplantation of other organs. One major reason for this fact is the difficulty in optimal handling of exocrine secretion.

Since 1979 the Munich group has been using prolamine (Ethibloc, Ethicon) in a consecutive series of 56 patients. Despite occlusion of the duct, a high incidence of pancreatic fistulas occurred, implicating the risk of a secondary bacterial contamination.

By modifying our surgical technique[5] to a strictly intraperitoneal placement of the pancreas graft, we wanted to know whether the resorption capacity of the peritoneum would provide a reduction of the incidence of fistulas.

PATIENTS AND METHODS

Fifty-two of those 56 patients received a pancreas and a kidney graft simultaneously. In these 52 patients we evaluated fistula incidence, frequency of reintervention, and graft loss rate secondary to an infected fistula. According to the different surgical techniques there are two groups: group 1 (n = 25), in which the segmental pancreas graft was placed partially extra-and intraperitoneally[6]; and group 2 (n = 27), in which the pancreas graft was placed strictly intraperitoneally along the ascending colon. The peritoneal cavity was continuously irrigated with saline solution over the first postoperative days.

RESULTS

The incidence of fistulas in group 1 was 52% compared to 44% in group 2. The rate of secondary bacterial contamination of a fistula with subsequent surgical reinterventions showed no significant difference betweeen both groups (2 *v* 2.5). In five patients in group 1 the rescue of an infected fistula failed, compared to two cases in group 2.

DISCUSSION

Our working hypothesis claimed that reabsorption of residual exocrine secretion by the peritoneum would reduce the incidence of fistulas. This could not be confirmed, because neither the fistula incidence rate nor the reoperating rate were statistically different. Specific and specific defense mechanisms of the peritoneum seem to have a positive effect against secondary infection of a fistula. Graft loss due to a fistula occurred in only 8% of patients treated with the modified technique (group 2) compared to 20% of the patients in group 1.

The improvement of graft survival rate (15% difference between group 1 and group 2) is probably based on defense mechanisms of the peritoneum. Therefore, we will continue to use the strictly intraperitoneal placement of duct-occluded pancreas grafts.

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REFERENCES

1. Sutherland DER, Najarian JS: In Brooks JR (ed): Surgery of the Pancreas. Philadelphia, Saunders, 1983, p 424

2. Landgraf R, Abendroth D, Land W: Horm Metab Res 13:57, 1983 (suppl)

3. Dubernard JM, Traeger J, Possa G, et al: Transplant Proc 15:1318, 1983

4. Sutherland DER: World J Surg 8:270, 1984

5. Land W, von Liebe S, Höpp H, et al: Chir Prax 27:15, 1980

6. Dubernard JM, Traeger J, Neyra P, et al: Surgery 84:633, 1978