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Islet Transplantation as a Treatment for Diabetes

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To the Editor: We respectfully disagree with two points in Robertson's comprehensive review of islet transplantation (Feb. 12 issue)¹: the assertions that patients with diabetes and autonomic insufficiency have a “dramatically shortened life span” and that transplantation necessarily reduces the rate of death. In the cited articles and an additional article by Navarro et al.,² most persons with diabetes had autonomic insufficiency. In fact, autonomic insufficiency lost its statistical significance after adjustment for renal dysfunction and cardiovascular disease in two population-based studies.^{3,4} When Navarro et al. compared pancreas-transplant recipients with medically treated patients, mortality rates were indistinguishable.²

Robertson states that “when successful, pancreas transplantation is particularly effective,” but we would argue that analyzing mortality rates after successful procedures as compared with unsuccessful procedures introduces bias. Although successful pancreas (or islet) transplantation may improve the quality of life, glycemic control, and other factors, such analyses understate transplantation-related risks. One of us and our colleagues recently reported increased mortality rates during the first four years after transplantation in patients with diabetes and preserved kidney function who were given a pancreas transplant as compared with those who were awaiting a transplant.⁵

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