

## Case Report:

# The Unusual Diabetic Recipient of a Cadaveric Kidney after a Decade

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### INTRODUCTION

At a recent international nephrology meeting in Bologna, one of the editors of this journal (E.A.F.) asked the other participants for documentation of successful cadaveric renal transplantation in type I diabetic patients treated 10 years or longer ago. There were few responses, since, before this time, general appreciation that such patients could be treated effectively with cadaveric transplantation had not yet been awakened by the important studies of Najarian and his associates at the University of Minnesota. The request was made by E.A.F. that brief reports of these unusual 10-year survivors be submitted.

### CASE REPORT

A 29-year-old wife of a physician had had type I diabetes mellitus since age 10. She developed renal failure in February 1971, and was treated with hemodialysis for 11 months before transplantation. Her insulin requirements were 15 units Lente/day, usually supplemented with 0-15 units/day regular insulin according to need. She developed visual difficulties from retinal hemorrhages and retinopathy at age 28, and during the 11-month period of pre-transplantation dialysis, she became permanently blind in the right eye from intraocular hemorrhage during dialysis. Her general condition rapidly deteriorated, requiring almost continuous hospitalization. Peripheral neuropathy was very severe, with bilateral footdrop and bilateral anesthesia below the knees.

Cadaveric renal transplantation was carried out on March 9, 1972, under therapy with cyclophosphamide, prednisone and anti-lymphocyte globulin (ALG). Several months later the cyclophosphamide was changed to azathioprine. The donor was a 19-year-old Caucasian female. Tissue matching was random, and there were no antigen matches at the HLA-A and B loci. Convalescence was extremely difficult because of pre-existing disability, and because of problems with glucose control. Mild rejection was diagnosed at 5 weeks and easily reversed. The neuropathy

slowly improved, and after 2 years she could stop wearing piano wire foot and leg braces. Daily prednisone was weaned to 20 mg by 1 year, and her present dose is 15 mg/day. Azathioprine dose is 75 mg/day. Current daily insulin requirements are 20 units Lente, supplemented with 16-26 units of regular insulin.

Almost 11 years after transplantation her BUN is 11 mg%, serum creatinine 0.7 mg%, and creatinine clearance 75 ml/min. Urinalysis shows no protein or other abnormalities.

Postoperatively, her environment was structured to allow her to function within the home and elsewhere despite partial blindness. Cataract extraction from the left eye was performed 6 months after transplantation. Because of failing vision of the "good" left eye, total vitrectomy was performed in May 1979. Enough vision was restored to permit performance of simple tasks. A second vitrectomy was performed in September, 1980. Subsequently, she has had glaucoma (treated with laser). She is now legally blind, but still has light perception.

The patient is a vital and highly motivated person who participates in a number of community functions, including the affairs of the American Diabetes Association and the National Kidney Foundation.

### SUMMARY

A partially blind diabetic woman who received a cadaveric kidney more than ten years ago obtained worth-while rehabilitation as the result of continuous excellent function of her graft.

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