



Noncompliance After Pediatric Liver Transplantation

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THE GOAL of this study was to analyze noncompliance and its outcome in pediatric liver transplant recipients.

MATERIALS AND METHODS

We reviewed the medical records of all patients treated for abnormalities in their liver allograft in which a diagnosis of rejection and/or immunosuppressive medication noncompliance was documented.

RESULTS

There were 34 episodes of documented noncompliance among 28 patients (15 males, 13 females) transplanted between March 1984 and May 1993. The mean age at the time of transplantation was 9 years (range, 2.6 to 16 years). The first episode of noncompliance was diagnosed at a mean age of 14.8 years (range, 10 to 20 years), and a mean of 6.5 years (range, 1.4 to 11.9 years) after transplantation. In those cases in which there was more than one episode of noncompliance, the mean time from the first to the second episode was 2.1 years (range, 0.6 to 3.9 years). At the time of noncompliance, 11 patients were on cyclosporine A (CyA) and 17 were receiving FK 506 (9 of which had been previously converted from CyA). There was a mean of 2.19 (range 0 to 6) episodes of rejection per patient before the diagnosis of noncompliance. Seventy-nine percent ($n = 22$) of the noncompliant children had a history of psychiatric/psychosocial associated factors. Liver biopsy specimens obtained at the time of noncompliance in 18 patients showed acute cellular rejection ($n = 8$), hepatitis ($n = 5$),

hepatitis/rejection ($n = 3$), and pericholangitis ($n = 2$). Twenty-two patients had reinstatement of their baseline immunosuppressive drugs, FK 506 ($n = 17$), and CyA ($n = 5$). The remaining six were converted from CyA to FK 506. Four grafts were lost to chronic rejection, and one to rupture of a hepatic artery aneurysm after successful treatment of rejection. Three patients required retransplantation, one of them twice. There were two recurrences of noncompliance after retransplantation. Two patients died, the patient with the ruptured aneurysm and one of the retransplanted patients secondary to chronic rejection.

CONCLUSIONS

We conclude that noncompliance in the adolescent liver transplant population should be suspected in any adolescent who presents with repeated episodes of rejection or with rejection associated with low immunosuppressant levels. When diagnosed, it should be treated aggressively both at the medical and psychiatric/psychosocial levels. There is a high incidence of graft loss when immunosuppressive medications are manipulated without physician supervision. The complex psychosocial issues may precipitate repeated episodes of noncompliance. The pathologic and therapeutic aspects of this complication will be discussed.

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