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

ENTS.

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 reinstitution 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 treat-
ment of rejection. Three patients required retransplanta-
tion, 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 adoles-
cent who presents with repeated episodes of rejection or
with rejection associated with low immunosuppressant lev-
els. 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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