Does Ciclosporin Induce Clinical Remission of Dialysis-Acquired Active Chronic Hepatitis?

J.M.		Morales ^a
C.		Prieto ^a
F.		Colina ^b
A.		Andrés ^a
F.		Moreno ^a
J.L.		Rodicio ^a

Departments of ^aNephrology and ^bPathology, Hospital 1° de Octubre, Madrid, Spain

J.M. Morales, MD, Hospital 1° de Octubre, Carretera de Andalucía km 5.400, E-28041 Madrid (Spain)

Dear Sir,

Recently, it has been reported that liver disease after renal transplantation represents the first cause of death in patients with a functioning renal transplant for more than 5 years [1]. Although rare entities such as veno-occlusive disease [2] or nodular regenerative hyperplasia of the liver [3] may appear, chronic hepatitis is the most frequent illness [4]. Nevertheless, at the moment, there is still no effective treatment.

We present herein a patient with dialysis-acquired active chronic hepatitis. While undergoing ciclosporine A (CS-A) treatment after renal transplantation, clinical remission became evident. The patient, a 46-year-old man, was diagnosed as having interstitial nephropathy in 1979. One year later he was on haemodialysis. In September 1983 he received a first cadaveric renal transplant without success, and he returned to dialysis 1 month later. In March 1985 he presented non-A, non-B hepatitis (enzymatic elevation in the absence of cardiac failure, hepatotoxic drugs, and seroconversion for cytomegalovirus, Epstein-Barr virus, virus A, and virus B). In October 1985, because of persistent enzymatic hepatic alterations, liver biopsy was performed. The liver tissue showed fibrous portal expansion, moderate piecemeal necrosis that involved less than 50% of the circumference of most portal tracts, chronic inflammatory portal infiltrate, and focal disseminated spot necrosis that involved all lobules. The histological activity index [5] score was 11. Diagnosis of active chronic hepatitis was made. The biochemical alterations were always present. In September 1986 he received a second cadaveric renal transplant and was treated with steroids 0.5 mg/kg/day and CS-A 10 mg/kg/day. The dose of Table I. Biochemical data of active chronic hepatitis before and during steroid and CS-A treatment

Date

3/1985

↑

Hepatitis non-A non-B

10/1985

3/1986 9/1986

†

↑

liver renal

biopsy transplantation

10/1986 12/1986 3/1987 9/1987 3/1988

↑

liver

biopsy

SGOT = Serum glutamic-oxaloacetic transaminase; SGPT = serum glutamic-pyruvic transaminase; γ -GT=glutamyltransferase; LDH = lactate dehydrogenase; HBsAg = hepatitis B surface antigen.

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CS-A was slowly decreased to maintain blood levels around 500 ng/dl. The graft function was good. The course of the disease was excellent with normalization of liver enzyme values on the 6th month after renal transplantation (table I). In September 1987, 1 year after transplantation, a second liver biopsy demonstrated a similar histological picture. Only the lobular changes were less pronounced. The histological activity index score was 10. The CS-A dose at that time was 5.5 mg/kg/daily. Currently, 18 months after transplantation, the liver enzymes continue at normal levels.

This patient developed active chronic hepatitis after dialysis-acquired non-A, non-B hepatitis.

This liver disease was always present with clinical activity. When he received a renal transplant, these alterations disappeared coincidental with steroid and CS-A therapy. The clinical improvement persists 18 months after CS-A treatment was begun.

Although the clinical amelioration can be spontaneous [6] or induced by steroids, the normalization of liver enzyme values coincidental with CS-A treatment may be an effect of this drug. The liver biopsy after 1 year of CS-A treatment showed an interesting finding: not only had the histological picture not worsened, but there was little improvement of the histological activity index score. Perhaps one could speculate that longer treatment would be necessary for histological remission. This case demonstrates that CS-A does not produce worsening of liver function in patients with preexistent hepatic disease, but that it could be effective in the treatment of active chronic hepatitis. For this reason we think that a trial in chronic hepatitis patients would be very interesting to clarify this provocative speculation.

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