

C06/053

TRANSMISSION OF HEPATITIS C VIRUS IN MONOZYGOTIC TWINS. CASE PRESENTATION.

F.L. Gonçalves Jr., R.N. Angerami, R.S.B. Stucchi, M.H.P. Pavan, S.A. Nouer, N.S.L. Gonçalves.

Viral Hepatitis Study Group, Infectious and Parasitic Diseases Discipline-DCM/FCM-Unicamp.

Immediately after the detection of hepatitis C virus C (VHC) in 1989, some studies have tried to evaluate the occurrence of its vertical transmission. Nowadays it's known that this transmission is infrequent, with higher occurrence in children of mothers carriers of high titers of RNA-VHC and in those infected by the human immunodeficiency (HIV). The viremia, whenever occurring, can be temporary or persistent, with or without clinical consequences and anti-HCV can disappear after 6 months of life. VHC can be detected also, in low titers, in colostrum.

Materials and Methods: It's a female patient, white, 39 years old, G2 PIC1, assisted at the Center for Assistance to Women - Unicamp, with gemelar pregnancy of 38 weeks and polydramnio, with no other interurrences, who gave birth, by Caesarian operation, to two female children, weighing respectively 2370 and 2270 grams, both in good conditions. The twins were monozygotic with a single placenta, having been considered as low weight newborns. The patient was being attended by the Viral Hepatitis Study Group of DMI-FCM/Unicamp, with persistent chronic hepatitis (HCP). Serology for VHB was negative, as well as auto-antibodies test. The patient was strongly reagent to anti-HCV, by ELISA 2 and presented positive result to RNA-VHC (Amplicor - ROCHE). In their first day of life, at 3 and 9 months, blood was collected from the vein of the two newborns and from the mother for both qualitative and quantitative tests on RNA-VHC (Amplicor - ROCHE) and anti-HCV (ELISA 2).

Results: At the time of parturition, the mother was anti-HCV reagent, with ALT/AST slightly high and RNA-VHC positive. Newborn 1 was anti-HCV inconclusive (ELISA) at birth and anti-HCV non reagent at 3 months. Newborn 2 was anti-HCV reagent at birth and inconclusive at 3 months of age. RNA-VHC was negative at birth for newborn 1 and positive for newborn 2. Nine months after parturition, the mother presented RNA-VHC positive with 6.2×1000 NC/ml. Newborn 1, at nine months, presented RNA-VHC positive, with 38.5×1000 NC/ml. Newborn 2, at nine months, presented RNA-VHC positive, with 5.0×1000 NC/ml.

Conclusion: There has been VHC transmission to the twins by a pregnant woman with chronic HVC. Although the twins were homozygotic, with a single placenta, only one of the newborns was infected at birth. VHC transmission to the other newborn has possibly happened at the perinatal period, perhaps through nursing, or any other associated factor.

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CHLOROQUINE (CQ) CAN INDUCE A BIOCHEMICAL RESPONSE IN PATIENTS WITH CHRONIC HEPATITIS C

D. Schuppan, H. Schöpper, C. Oesterling, R. Somasundaram, U. Stoelzel, G. Boigk, and E. O. Riecken, Dept. Of Gastroenterology and Hepatology, Klinikum B. Franklin, Free University of Berlin, Germany.

Background: Removal of hepatic iron, e. g., by venesection, decreases hepatocellular inflammation in patients with chronic hepatitis C. By blocking lysosomes low dose CQ suppresses liver iron, serum ferritin, AST and ALT in patients with porphyria cutanea tarda. CQ also blocks cellular release of TNF- α .

Methods: Patients were randomised to receive IF monotherapy (3x3 Mio U. IF α -2b weekly for 6 months) or oral CQ (2x250mg CQ-base weekly for 6 month), preceding a 6 month course of IF in combination with CQ. Nonresponders and relapsers after IF received CQ/IF treatment in an open arm. Patients were followed up in monthly/bimonthly intervals, and complete response was defined as a negative HCV-PCR and a normal ALT and AST.

Results: Of the 52 patients (age 48 ± 11 years) that have been included up to now, 22 were treated with IF alone, 26 with the IF/CQ combination (including 8 nonresponders or relapsers) and 4 stopped treatment. At present, CQ alone did not enhance virus elimination, but significantly decreased ALT and γ GT after 3 months, whereas IF alone was ineffective. After 6 months there were 6 biochemical responders in the group that received CQ alone.

Table: 6 month course of ALT and γ GT under CQ-therapy

month	0	3	6
patient-number	26	16	15
ALT	65 \pm 42	21 \pm 10**	32 \pm 13**
γ GT	58 \pm 56	31 \pm 17**	44 \pm 34**

**p<0,01, *p<0,05 vs. month 0 (t-test)

Conclusions: 1. Low dose CQ can normalize ALT and γ GT levels in patients with chronic hepatitis C. 2. Final analysis of our prospective study will show if this treatment also supports virus elimination.

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AMANTADINE FOR CHRONIC HEPATITIS C

JB Gross, JJ Poterucha, AA Gossard, KD Lindor, NN Zein, Mayo Clinic and Foundation, Rochester, MN, 55905.

Amantadine HCl was reported to decrease ALT and HCV RNA levels in pts with chronic hepatitis C who had not responded to interferon, but further experience has produced mixed results. **Aim:** to assess the effect on serum ALT and HCV RNA of amantadine HCl in pts with chronic hepatitis C who had not responded to interferon therapy or who were not candidates for interferon. **Methods:** Pts with biochemical and histological evidence of chronic hepatitis and serum positive for HCV RNA by PCR were offered treatment if they were not candidates for or declined treatment with interferon. We excluded pts with congestive heart failure, arrhythmia, psychosis, severe depression, creatinine >20% above normal, and those on potentially interacting drugs. Amantadine 100 mg p.o. BID was given for 12 weeks. Monitoring tests were performed at 2, 4, 8, and 12 weeks. Serum ALT and quantitative HCV RNA (bDNA assay) were measured at baseline and at the end of treatment. **Results:** Fourteen pts were treated, 9 of whom had previously been treated with interferon. Median baseline ALT was 192 (71-433) and median baseline HCV RNA was 3.9 MEq (0.8-57). Three pts stopped treatment because of adverse effects (rash, edema, GI symptoms). None of the remaining 11 pts had normal ALT at the end of treatment. ALT decreased in 5 pts, was higher in 4, and unchanged in two. None of 7 pts lost HCV RNA; it decreased in 2, was higher in 3, and unchanged in two. Changes in ALT and RNA were discordant more than half the time. **Conclusions:** Treatment with amantadine HCl 100 mg BID: 1) is not tolerated by some patients; 2) is associated with partial biochemical or virological responses in a minority of patients; 3) does not appear to be effective in inducing a biochemical or virological remission in patients with chronic hepatitis C.

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REBAVIRIN AND RECOMBINANT INTERFERON-a 2B IN PATIENTS WITH CHRONIC HCV INFECTION NONRESPONDERS OR RELAPSED AFTER MONOTHERAPY WITH INTERFERON-a

K. Antonov, D. Jeleu, Z. Krastev

Clinic of Gastroenterology, St. Ivan Rilski' University Hospital, Sofia, Bulgaria.

Aim: The aim of our study was to investigate the efficacy of therapy Ribavirin and recombinant Interferon-a 2b (rIFN-a) in patients with chronic HCV infection nonresponders or relapsed after monotherapy with IFN-a. **Patients and Methods:** 11 patients with chronic HCV infection (8 males and 3 females), age 48 ± 9 years, was involved in the study - 3 nonresponders and 9 relapsed after rIFN-a therapy alone (>108 MU common dose). Nine of them had a blood transfusion in the past and histological finding - chronic active hepatitis (10) and cirrhosis (1). The scheme of treatment for all patients was: IFN-a 2b 3 MU thrice weekly and Ribavirin 1000 mg (<75 kg b.w.) or 1200 mg (>75 kg b.w.) daily for 6 months. Clinical, biochemical data and side effects were documented every month and at 3th and 6th months after the stopping of therapy. HCV viremia were tested in the beginning and in the end of treatment with RT-PCR. HCV genotype 1 was determined by serological genotyping in 10 patients. One remained untypable. **Results:** In the end of treatment ALT was normal in 10 and serum HCV RNA was undetectable in 10 patients. Six months later ALT was still normal in 6 (54%). Severe side effects didn't document. The patients with liver cirrhosis, who had unknown HCV genotype, didn't normalize ALT during all therapy. **Conclusion:** Ribavirin and interferon-a when simultaneously given are effective in patients nonresponders or relapsed after rIFN-a therapy with HCV genotype 1 and a blood transfusion in the past. The liver histology is may be the more important predicting factor for the success of this combined therapy.