## **ACUTE VIRAL HEPATITIS IN DRUG ADDICTED PATIENTS**

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Twenty-five patients with acute viral hepatitis and drug abuse (heroin) aged between 15 and 30 years were studied. They were hospitalized in the Department of Infectious Diseases and Epidemiology, Medical University of Varna, during the period from January till October, 1998. The following types of viral hepatitis were established: acute viral hepatitis A (AVH-A) - in 7 patients, acute viral hepatitis B (AVH-B) - in two, acute viral hepatitis C (AHV-C) - in 6, non-defined AVH - in 9, and toxic hepatitis - in one patient. Most cases with AVH-C were clinically clearly manifested and there were no diagnostic difficulties. Probably, the non-defined AVH cases belonged to AVH-C infection but they remained not proved because of the absent diagnostic opportunities.

**Key-words**: Acute viral hepatitis, drug abusers, diagnosis, biochemistry, serologic markers

Acute viral hepatitis (AVH) is an actual diagnostic and therapeutic problem of social importance as it affects a high percentage of the population among the so-called group of i. v. drug abusers. A variety of course types of AVH with potential possibility of chronification and hepatic cirrhosis based on drug liver damages can be observed (1-5).

The aim of this study is to analyze the course of AVH types in drug addicted patients. The objects of the investigation are the clinical, laboratory and serological patterns of AVH as well as the influence

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D, Radkova, Dept. of Infectious Diseases and Epidemiology, Medical University, 55 Marin Drinov St, BG-9002 Varna, BULGARIA E-mail: infect@asclep.muvar.acad.bg of intravenous drug abuse on the course of AVH.

### **MATERIAL AND METHODS**

The trial covered a total of 25 patients with acute viral hepatitis (AVH) and drug abuse (heroin) aged between 15 and 30 years (mean age of 19,22 years). They were studied for 2-3 months up to 3 years. The patients were hospitalized in the Department of Infectious Diseases and Epidemiology, Medical University of Varna, during the period from January till October, 1998. Of them, 92,59 % were males but 7,41 % were females. The average hospital stay was of 13,14 days. The following types of acute viral hepatitis

(AVH) were established: AVH-A - in 7 patients, AVA-B - in two, AHA-C - in 6, non-defined AVH - in 9 who used one and the same intrument, and toxic hepatitis - in one patient. Routine clinical and laboratory methods were applied such as blood parameters, biochemical tests (blood bilirubin, thymol test, serum aminotransferase activity), serological markers for hepatitis, and in some cases only - echography of the liver.

### RESULTS AND DISCUSSION

Our data showed that the preicteric complaints of these patients included an asthenoadynamic syndrome and a dyspeptic one (in 100 % of the cases each) as well as an influenza-like syndrome (in 11 % of the cases). No arthralgic and allergic syndromes were observed. Jaundice and liver enlargement (2-3 cm below the costal arch) were observed in all the patients. There was no anicteric forms of the disease. The clinical form of the disease was considered slight in 15 cases (60 %) but severe in the rest 10 ones (40 %). Some average biochemical data were demonstrated on Table 1.

Particular clinical forms presenting with some signs such as cholestasis or

ascites were not found out. Eight patients left the hospital on their own will, three of them with high enzyme activity (377,33 UI). The rest five patients remained one week in the hospital and they were not tested again. A common therapy consisting of glucose and mineral salt infusions, vitamins, and liver protecting drugs was administered in addition to the tranquilizers in order to avoid the medical abstinence.

It should be emphasized that in this contingent the young male patients prevailed. The serological types of AVH proved were AVH-A, B, and C. Probably, the non-defined AVH cases belonged to AVH-C. The diagnosis remained not confirmed because of the absent diagnostic opportunities during this period. A similar situation was observed with the laboratory data about AVH and the negative serological markers for the remaining types of hepatitis. The clinical picture was typical in most cases. The anicteric course was registered along with encephalopathy that could be a diagnostic problem because of the analogy between the clinical symptoms and the drug abuse ones. Many patients left the hospital on their own will and it seemed possible that they could not stop the i. v. administration of heroin any more.

**Table 1**Biochemical parameters in AVH patients

Patients / parameters	Blood bilirubin (mmol/l)	Thymol test (ShU)	SGPT (UI)
Hospitalized patients	104,4	7,88	575,96
Discharged patients	21,82	9,43	140,68

The slight form of the disease could be due to the prevalence of AVH-C among this contingent as it was characterized with a slight or even absent expression of the symptoms and insignificant cytolysis.

The drug abuse did not considerably influence upon the course of AVH. This fact could be explained with the young patients' age and the short duration of the drug abuse. The therapy of the AVH was identical to that of liver cirrhosis. Addi-

tionally, the patients were given tranquilizers in order to prevent the medical abstinence consisting in disturbed sleep and irritation up to aggression.

In can be concluded that the AVH in drug addicted patients is a serious diagnostic and therapeutic problem, especially with the AVH-C as the observation of these patients is difficult, the outcome is unexpected, and the risk for chronification of the pathological process is high.

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# Остри вирусни хепатити у медикаментозно зависими лица

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Резюме: Проследени са 25 болни с остър вирусен хепатит и наркомания (хероинзависимост) на възраст между 15 и 30 г., пролежали в Катедрата по инфекциозни болести и епидемиология на Медицинския университет-Варна за периода от януари до октомври 1998 г. Установени са следните типове вирусен хепатит: остър вирусен хепатит А (ОВХ-А) - при 7 болни; ОВХ-Б - при 2; ОВХ-С - при 6; неопределен ОВХ - при 9 и токсичен хепатит - при един болен. Повечето случаи бяха с добре изразена клинична симптоматика и не предизвикаха диагностични затруднения. Неопределените форми на ОВХ вероятно се дължаха на ОВХ-С-инфекция, но останаха недоказани поради липса на диагностични възможности.