

EPIDEMIOLOGICAL, CLINICAL AND LABORATORY PECULIARITIES OF AN EPIDEMIC OF ACUTE VIRAL HEPATITIS DURING 1990-1991 IN THE REGION OF VARNA

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The acute viral hepatitis (AVH) is a widely spread disease throughout the whole world. In our country in 1990, 23904 cases were registered (morbidity rate of 265,89‰) compared to 9586 (morbidity rate of 106,67‰) for the previous year. The highest AVH morbidity rate in the 12 regions of the country was registered in Varna and Varna region (493,89‰) and the lowest one - in Pernik region (78,54‰). This stimulates us to study AVH morbidity rate and the features of the developed epidemic in Varna and the region for the period of August 1990 - March 1991.

Epidemiological, clinical and biochemical tests of 1563 AVH cases out of 2563 cases admitted in the Department of Infectious Diseases during this period in Varna were performed. To all the patients were made the usual liver laboratory tests, whereas in the severe forms some hemostasis factors were studied. The ELISA test was applied to distinguish HBsAg. The values for different data are given as the mean SEM.

The AVH showed autumn and winter seasonal character in its consecutive cyclic boom. It turned out that type A (89,25%) was prevalent. The AVH-non-A-non-B forms were eliminated in this study. The most affected persons were children, students and other young persons. Most cases were registered in the towns of Varna, Provadia, Dalgopol, Dolen Chiflick, and Beloslav.

The clinical pictures of AVH-type A presented wide variations of cases. High prevalence of mild forms in this epidemic was observed. The patients were admitted at the onset of the jaundice, after a period of 3-7 days on the appearance of different vague symptoms. Clinical characteristics of AVH-A were anorexia and nausea in 65,07% of the cases; arthrogynia in 1,72%; fever in 2,57%; larvated beginning in 1,93%. In the hospital the following signs were observed: weakness in 42,29% during $3,90 \pm 1,75$ days; anorexia in 11,03% for a period of $4,00 \pm 1,87$ days; nausea in 15,70% and vomiting in 5,59% ($3,64 \pm 1,47$ days); right upper quadrant pains - in 8,81% of the

cases. Hepatomegaly was found in 90,20% and pain on spleen palpation in 1,56%. The liver function tests abnormalities are indicated on table 1.

Table 1. Liver function test abnormalities in AVH during the epidemic in 1990-1991 in Varna and Varna region

Test	Mean \pm SEM	Type	Duration
Serum bilirubin in mol/l	77,01 \pm 50,97	AVH-A	1-2 weeks
	93,15 \pm 61,34	AVH-B	3-4 weeks
ASAT in IU	445,00 \pm 401,68	AVH-A	1-3 weeks
	477,62 \pm 256,54	AVH-B	3-6 weeks
Mac Lagan in SHU	21,83 \pm 11,82	AVH-A	1-3 months
	14,82 \pm 9,16	AVH-B	2-4 months

Only 38 (2,73%) of patients had normal Mac Lagan test at discharge. The mean period of isolation for AVH-A was 14,32 days. There are not lethal cases during the epidemic, whereas 26 patients in 1990 in the country died. The epidemiological data revealed an incidence in Varna and region that correlated with the data of our previous investigations. For a long period a constant ascending tendency of AVH-A morbidity in all the towns of the region is shown. We have investigated the following causal factors: a complex of unfavourable environmental conditions, low standards of hygiene of the population, lack of disinfectants, waterproviding failures; uncomplete nutrition of children; absence of postexposure gamma globulin prophylaxis. Many subclinical forms such as anicteric remain undetected. In 24,25% of the cases close personal contacts, e.g., family members and permanent and temporary household residents were observed. These individuals are at a particularly high risk of developing the AVH-type A. Occasional school - or classroom centered outbreaks of AVH-A had also developed.

We conclude that :

1. AVH-A infection is considered generally a mild disease in young individuals. Lethal cases do not result from it.
2. There is a constant tendency of AVH-type A elevation in Varna and the region of Varna for the last years.
3. We may propose a consideration of postexposure prophylaxis and measures to check the route of infection and to diminish the development of other epidemic in our region.