



Hemodynamic study of hepatitis B virus carriers

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Abstract

AIM: To a study the real state of health of HBV carriers (ASC for
ahort) in the view of hemodynamics.

METHODS: The nailfold microcirculation of 60 patients with HBV
(51 cases males, 9 females, the average age 29.5 ± 11.9 years)
was studied by MCX-5A systemic micro-circulation instrument. And
the hepatic hemodynamics and hemomicirculation state of 118
patients with HBV (90 males, 28 females, the average age $29.2 \pm$
 11.4 years) were studied by RG-2B systemic rehohepatography. In
9 patients with HBV, we performed hepatic biopsies. All the results
were compared with that in normals.

RESULTS: After a close clinical observation and pathological study

of liver in 60 cases of what is called HBV carriers, we found that the
single and general integral values of their nailfold microcirculation
(0.38 ± 0.32 , 0.89 ± 0.52 , 0.97 ± 0.69 , 2.24 ± 0.96) were
significantly different from the values of healthy group ($0.17 \pm$
 0.09 , 0.49 ± 0.27 , 0.55 ± 0.31 , 1.21 ± 0.47), ($P < 0.01$). And its
abnormal rate (55.0%) was markedly higher than the abnormal rate
of healthy group (3.3%) ($P < 0.01$). The values of h_s , h_a/h_s , t_a of the
rehohepatography in 118 cases of the patients ($0.0949 \Omega \pm 0.0297$
 Ω , 0.226 ± 0.103 , $0.223 s \pm 0.045 s$), were significantly different
from the values of healthy group ($0.1230 \pm 0.0258 \Omega$, 0.165 ± 0.080 ,
 $0.175 s \pm 0.022 s$), ($P < 0.01$). And its abnormal rate (36.5%) was
markedly higher than the abnormal rate of healthy group (0). ($P <$
 0.01). After performing hepatic biopsy in 9 cases of the patients,
we found chronic persistent hepatitis in 5 cases and chronic active
hepatitis in 2 cases, and only 2 cases have no significant pathologic
damage.

CONCLUSION: Most clinical HBV carriers have a mild to middle
hepatic damage and they belong to sub-healthy state. Nearly none
of them is healthy.

Key words: Hepatitis B virus; Hemodynamics; Microcirculation; Liver/
pathology

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