In addition to HBV exposure through sweat, wrestlers may also be susceptible to infection because of weakened immune responses during training or from steroid use.



Test, Vaccinate Wrestlers for Hepatitis B, Data Suggest

BY JONATHAN GARDNER London Bureau

restlers should be tested for hepatitis B virus and vaccinated at the beginning of their careers in an effort to prevent the spread of the virus through sweat, according to a Turkish researcher who conducted a

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study on the prevalence of the disease among Olympic wrestlers.

Selda Bereket-Yücel of Celal Bayar University, Manisa, Turkey, examined blood and sweat samples from 70 male wrestlers who competed at the Turkish national championship for signs of hepatitis B virus (HBV).

Thirteen percent of the wrestlers tested positive for HBV DNA in their blood, and 11% had HBV DNA in their sweat.

In response to a questionnaire, 37% of the wrestlers stated that they also had suffered a bleeding wound during training or competition, raising concerns that the virus could be transmitted during wrestling matches.

Sporting organizations have focused on the spread of the human immunodeficiency virus through contact sports, but none has acted on HBV, which is transmitted more easily because it is present in

Sports groups have focused on the spread of HIV through contact sports and not on HBV, which is transmitted more easily and is more stable in the environment. higher concentrations in the blood and is more stable in the environment. Dr. Bereket-Yücel wrote (Br. J. Sports Med. 2007 March 1[Epub doi: 10.1136/bjsm. 2006.032847]). "Various experts have produced guide-

lines on the management of players with bleeding wounds," Dr. Bereket-Yücel wrote.

"However, the results of this study suggest that sweating may be another way of transmitting HBV infection. The correlation between sweat and blood HBV DNA was statistically significant in this study."

No previously published study has examined HBV DNA in sweat and the incidence of transmission.

"If the origin of the HBV in the wrestlers who had (occult) HBV were identified by secant analysis, then that would strengthen the hypothesis that HBV could be transmitted by sweat in contact or collision sports," Dr. Bereket-Yücel said.

Wrestlers tested for the study were between 18 and 30 years old. Samples of sweat collected during training were tested for HBV DNA for liver biochemistry, HBV serology, and HBV DNA.

The prevalence of HBV in wrestlers cannot be compared with prevalence in other athletes because no other researcher has measured it, Dr. Bereket-Yücel wrote.

In addition to the exposure to HBV through sweat, wrestlers may also be susceptible to infection because of weakened immune responses during training and competition or because of the use of anabolic steroids, although Dr. Bereket-Yücel noted that the wrestlers in this study had not been asked whether they used steroids.