

Prevalence of HIV, hepatitis B and C virus infections among candidates for orthopedic trauma surgeries

Infectious diseases are diseases caused by bacteria, virus or fungus micro organism and very readily given by one person to another. These diseases especially those that are transmitted via human blood and cause disease in humans include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV) which are among most important public health problems. Patients who undergo orthopedic surgery are at higher danger of spreading infectious diseases from and to others, due to repeated blood examinations and injection, drains (devices established for exit of fluids or pussy material from a cavity, wound, or infected area) secretions and receiving blood products. Use of harder instruments such as pins by orthopedic surgeons would increase the chance of transmission too. However, the amount of forced danger is different in different locations; demanding different studies in different fields. This would be relevant for decision- making about routine use of viral assessments before surgeries in each hospital and each geography part around. In order to control of these health problems, the distribution of Hepatitis B Virus (HBV) Hepatitis C Virus (HCV) and human immunodeficiency Virus (HIV) infections must be known. Therefore, this study was performed to define the occurrence of these infections among patients who underwent orthopedic surgery in a general training hospital (Tehran, Iran) during 2009 to 2011.

Relations of the infection rates with age, gender, marital status, house location, addiction history, hospital admission history, previous surgery, blood transfusion, dentistry actions, and previous medical history were evaluated.

Totally, 320 patients were studied. 290 of the patients were male and 30 were female. The patients' age mainly ranged from twenty-five to fifty years old.

In whole, 10 patients (3.2%) had HCV, 2 patients (0.6%) had HIV and 8 patients (2.5%) had HBV Infections. None of the evaluated factors had significant relationship with HCV, HBV, and HIV infections.

Although addiction and excessive use of drugs are also common spreading ways for HIV, but the HIV-positive patients in this study had no addiction history.

While current results show that the danger of scattering substance or viruses causing disease in a hospital is low, some dangers are unavoidable. However the danger can be greatly reduced by following the accepted recommendations of the Center for disease control and prevention (CDC), public health services (PHS) and other health agencies. Orthopedic surgeons should use these established advices too. Plus, Regular use of diagnostic tests for infectious disease such as HIV and viral hepatitis should be considered before orthopedic surgeries.

*Dr. **Bahram Boduhi** and Dr. **Babak Otoukesh**
MD, Orthopedic Surgeon, Department of Orthopedic Surgery,
Rasoul-e-Akram Hospital, Iran University of Medical Sciences
Tehran, Iran*

Publication

[Prevalence of Hepatitis B virus, Hepatitis C virus and human immunodeficiency virus infections among patients candidate for orthopedic trauma surgeries.](#)

Yeganeh A, Hatami N, Mahmoudi M, Boduhi B, Saidifard M, Otoukesh B.
Med J Islam Repub Iran. 2015 Oct