บทคัดย่อวารสาร

# A case-control study of HIV seroconversion in health care worker after percutaneous exposure

Cardo DM, Culver DH, Ciesielski CA, Srivastava PU, Marcus R, Abiteboul D, Heptonstall J, Ippolito G, Lot F, McKibben PS, Bell DM.
*The New England Journal of Medicine 1997;337:1485-90.*

The average risk if HIV infection after percutaneous exposure to HIV-infected blood is 0.3%. Factors affecting this risk were identified in a case-control study by Cardo et al. The case patients were health care workers who became seropositive after exposure to HIV, as reported by national surveillance systems in France, Italy, the United Kingdom, and the United States. The controls were health care workers who were exposed to HIV but did not seroconvert.

Logistic-regression analysis based on 33 case patients and 665 controls showed that significant risk factors for seroconversion were deep injury, injury with a device that was visibly contaminated with the source patient's blood, procedure involving a needle placed in the source patient's artery or vein, and exposure to a source patient who died of the acquired immunodeficiency syndrome within two months afterward. The case patients were significantly less likely than the controls to have taken zidovudine after the exposure (odds ratio = 0.19; 95% confidence interval 0.06-0.52).

The authors conclude that the risk of HIV infection after percutaneous exposure increases with a larger volume of blood and is related to the titer of HIV, and that postexposure prophylaxis with zidovudine appears to be protective.

This findings may interest expert panels to develop recommendation for postexposure prophylaxis. Health care workers who exposed to HIV-infected blood would have more confident to take chemoprophylaxis even it had side-effect and questionable of its safety.

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