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Safety and immunogenicity of varying dosages of trivalent inactivated influenza vaccine administered by needle-free jet injectors.

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Abstract

To evaluate the perceived pain, other adverse events, and immunogenicity of influenza virus vaccine administered by needle-free jet injector (JI) compared with that of vaccine administered by needle and syringe (N&S), we randomly assigned 304 healthy young adults to receive one of three dosages (0.5, 0.3, or 0.2 ml) of the 1998-1999 season vaccine administered by either of two JI devices or by N&S. In multivariate analysis, female gender and JI administration were associated with higher levels of pain reported at the time of vaccination as well as with the occurrence of local injection site reactions following vaccination. Immune response did not vary significantly by dosage but administration by one JI device was associated with higher post-vaccination H1N1 antibody titers.

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