

COMPARING EFFECTIVENESS BETWEEN INTRAMUSCULAR AND INTRADERMAL TRIVALENT INFLUENZA VACCINATION IN NURSING HOME RESIDENTS: A RANDOMISED CONTROLLED TRIAL

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BACKGROUND: There is no study comparing clinical effectiveness between intradermal (ID) and intramuscular (IM) administration of influenza vaccination in nursing home older adults.

METHODS: This was a single-centre, randomised, controlled, open-label, parallel group trial from October 2013 to April 2014 in nine nursing homes comparing the effectiveness between full-dose IM and ID immunisation of the trivalent influenza vaccine. Outcomes were 1-year hospitalisation due to pneumonia and 1-year laboratoryconfirmed influenza infection between the two groups.

RESULTS: Overall, 100 nursing home older adults (mean age, 82.9 ± 7.4 years; male, 36%) were randomised. Baseline characteristics were similar between the two groups. At 1 year, 8 and 11 participants were hospitalized at least once due to pneumonia in ID and IM groups, respectively ($P=0.44$). Two and four participants had laboratory-confirmed influenza infection in ID and IM group, respectively ($P=0.68$).

CONCLUSION: ID vaccination of influenza vaccine may not be more effective than IM vaccination. However, this study was limited by its small sample size and both clinical outcomes were lower in ID group. Clinical trial with larger sample size would be necessary.