

Poster presentation

Autoimmune response following influenza vaccination

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from 15th Paediatric Rheumatology European Society (PreS) Congress
London, UK. 14–17 September 2008

Published: 15 September 2008

Pediatric Rheumatology 2008, **6**(Suppl 1):P146 doi:10.1186/1546-0096-6-S1-P146

This abstract is available from: <http://www.ped-rheum.com/content/6/S1/P146>

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The aim of this study was to assess autoimmune response following annual influenza vaccination in apparently healthy adults, staff at a children's hospital.

92 healthy adult subjects were tested for autoantibodies including antinuclear antibodies (ANA), anti-extractable nuclear antigen antibodies (anti-ENA), antiphospholipid antibodies (aPL), namely anticardiolipin antibodies (aCL), anti-beta2-glycoprotein I antibodies (aβ2-GPI) and lupus anticoagulant (LA). Blood samples were taken from each participant before annual influenza vaccination, one month and six months after vaccination.

Before influenza vaccination 26% of participants were positive for ANA, 1% for anti-ENA, 16% for aCL, 7% for aβ2-GPI and 2% for LA. One month after influenza vaccination 76% of participants showed no change in autoantibodies titres. Six months after influenza vaccination 74% of participants showed no change in autoantibodies titres. Overall, there was no statistically significant difference in the percentage of positive ANA, aCL, aβ2-GPI and LA before and 6 months after the vaccination. Five participants developed autoantibodies 6 months after the vaccination and one who was initially low positive for ANA became highly positive (1:320). Eleven participants had only transiently increased autoantibodies. Persistently positive or progressively increased levels of autoantibodies during 6 months' follow up were observed in 6 persons (7%).

Our study showed a high percentage of positive autoantibody testing among healthy adult staff at a children's hos-

pital. There was no statistically significant difference in the percentage of positive autoantibodies before and after influenza vaccination. However, our study clearly demonstrated induction of autoantibodies production in selected subjects.