# Journal of the International AIDS Society

## Poster presentation

**Varicella vaccination in HIV-positive individuals – a time to act** E de Barra, C Rock\*, B Kiely, C McNally, F Lyons and C Bergin

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from Ninth International Congress on Drug Therapy in HIV Infection Glasgow, UK. 9–13 November 2008

Published: 10 November 2008

Journal of the International AIDS Society 2008, 11 (Suppl 1):P293 doi:10.1186/1758-2652-11-S1-P293

This abstract is available from: http://www.jiasociety.org/content/11/S1/P293

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### Purpose of the study

Primary varicella infection in the HIV population can have serious sequelae. The HIV non-VZV immune population is at risk of attack rates of up to 90% from infected household contacts, who are predominantly children. Universal childhood varicella vaccination is currently under review in Ireland. New recommendations of the Advisory Committee on Immunisation Practices (MMWR) 2007 include expanding the use of varicella vaccine for HIV-infected adults and adolescents with CD4 >200, with vaccination of household contacts of those with CD4<200. These guidelines prompted us to review our HIV patient cohort, 30% of whom are from sub-Saharan Africa (SSA), reflecting the changing demographics of the Irish population. VZV non-immunity is known to be higher in the SSA population.

#### **Methods**

We undertook a retrospective analysis of all new patients presenting to our HIV service between 2002 and 2007. Patient demographics including country of origin, VZV IgG status and CD4 count were collected. The household membership of all non-VZV immune patients was attempted to be ascertained by telephone.

#### Summary of results

594 HIV-positive patients were tested for Varicella IgG. 544 (91.6%) of these were VZV IgG positive. Of the 50 that were not immune, 42 had CD4 >200. 218 (36.8%) of the total were from SSA. Of this group, 33 (15%) were non-immune compared with only 15 (4%) of the European cohort. Non-immune patients with CD4>200 were contacted by telephone and offered vaccination. This is

currently ongoing. The SSA patients were cautious in disclosing their living circumstances. Those non-immune patients with CD4<200 were advised to seek vaccination for their household contacts.

#### Conclusion

Primary varicella infection in the HIV-positive population poses a credible threat. Our review of VZV immune status in a cohort of HIV-positive patients identifies the SSA population is a particular "at risk" group. Current guidelines advise that non-immune patients with CD4 counts >200 can be vaccinated, whereas those with CD4 counts <200 should have their household contacts vaccinated. The non-immune patients who had CD4>200 were offered vaccination. Educating patients re household contact vaccination is difficult in this population. Inclusion of VZV in the universal childhood vaccination schedule would help in this regard. We are presently assessing all patients with regard to requirement for VZV vaccination, with particular focus on those who migrated from SSA prior to 2002.

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