GGNHSB PHPU NEWSLETTER

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Volume 3 Issue 6 June 2004

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The use of VZIG in pregnancy

Rationale

The rationale for giving Human Varicella-Zoster Immunoglobulin (VZIG) to pregnant women exposed to chickenpox/zoster is to attenuate varicella infection which, due to the mild immunosuppression associated with pregnancy, can be fulminant. **VZIG does not prevent infection, even when given within 72 hours of exposure, or provide any protection to the foetus.** It is not given to pregnant women with the intention of preventing congenital varicella syndrome.

All pregnant contacts of chickenpox *without a definite history of chickenpox* should be tested for Varicella-Zoster antibody before VZIG is given since two-thirds of women with a negative history of chickenpox have antibody. Please note that blood taken from pregnant women attending ante-natal clinics is stored in the Regional Virus Laboratory and is available for varicella testing should it be required.

Recommendations in pregnancy

VZIG is indicated in pregnancy **only** if the woman has no serum antibodies to V-Z virus **and** has had **significant exposure** to chickenpox/zoster

Significant exposure to an index case has 3 aspects and all are relevant when estimating the risk to the pregnant contact.

Type of infection in index case

- chickenpox
- disseminated zoster
- exposed zoster in an immunocompetent patient
- localised zoster in an immunosuppressed patient (viral shedding may be greater)

Timing of exposure to index case

- exposed to chickenpox or disseminated zoster between 48 hours before onset of rash and cropping has ceased and crusting of lesions
- exposed to localised zoster between day of onset of rash and crusting of lesions

Duration of exposure to index case

- exposed in the same room for 15 minutes or more
- exposed face-to-face e.g., during conversation
- exposed in a large open ward

Recommendations in neonates

Risks to the foetus and neonate from maternal chickenpox are related to the time of infection in the mother. The incidence of congenital varicella syndrome has been estimated at 2-5% of those infected in the 1st trimester of pregnancy. However, recent information suggests that the true risk may be below 1%. Reports of damage after maternal chickenpox or shingles in the 2nd and 3rd trimesters are rare. VZIG is recommended for the following infants **up to 4 weeks** after birth:-

Neonate - Maternal infection pre/post partum

Maternal Infection	Onset of infection	VZIG
Chickenpox	1-7 days pre partum	Yes
Chickenpox	1-28 days post partum	Yes

Neonate – contact of case

Infection in index case	Maternal history	Maternal antibody	VZIG
Chickenpox /shingles	No (or ?)	No	Yes
Chickenpox /shingles	No (or ?)	Yes	No
Chickenpox /shingles	Yes	-	No

Premature neonate (<30 wks or <1 kg) – **contact of case**

Infection in index case	Maternal history	VZIG
Chickenpox /shingles	No	Yes
Chickenpox/shingles	Yes	Yes

Supplies

VZIG is held by the Scottish National Blood Transfusion Service and can be obtained by calling **357 7700**

PCT's infection-control audit

The infection control audit tool for GPs and general dental practitioners (April 2003), has recently been reviewed and revised. The tool was produced by the PCT's Prevention and Control of Infection Team following publication of the CSBS Healthcare Associated Infection (HAI) Infection Control (Dec 2001) Standards. The revised audit tool (version 2, May 2004), available on request from the Prevention and Control of Infection Team, is a self-assessment tool for independent practitioners which defines acceptable standards for managing the environment and minimising the risk of infection to patient, staff and relatives.

A copy of the audit tool can be obtained by contacting Sarah Caulfield at **211 3568** or by email at: Sarah.Caulfield@gartnavel.glacomen.scot.nhs.uk

Immunisation safety review

An extensive report on the numerous controversies and allegations surrounding vaccines and autism by the Safety Review Committee at the Institute of Medicine (IOM), USA, was recently published. The IOM has 3 decades of experience in conducting independent expert analysis on significant public health policy issues. This includes a substantive interest in vaccine safety. Any person with financial ties to vaccine manufacturers or their parent companies is automatically excluded from the panel.

The committee begins from a position of neutrality in all matters that it is investigating i.e. there is no presumption that a vaccine does/does not cause an adverse event, (in this case autism). The weight of the available clinical and epidemiological evidence informs their deliberations. Its conclusions are as follows.

There remains considerable uncertainty about the prevalence and incidence of autism as well as time-trends associated with the condition. Some studies have claimed increases in incidence and prevalence, however, it is difficult to prove that the increase is real rather than the effect of improved recognition or adoption of broader diagnostic categories. The consensus of scientific experts is that autism is generally caused by pre-natal exposures including neurological, immunological, metabolic and environmental factors as well as infectious diseases. A strong genetic component has been demonstrated in twin studies.

The hypotheses that the MMR vaccine and thiomersal-containing vaccines were causally associated with autism were extensively explored. Epidemiological studies carry the most weight in a causality assessment. These studies measure health-related exposures in a defined set of subjects (in this case vaccinees) and use the information to draw inferences about the nature and strength of associations between such exposures and outcomes within that defined population. All recent published research and unpublished epidemiological research were examined.

In recent years, studies examining the association between MMR and autism, including 9 controlled observational studies, 3 ecological studies and 2 passive reporting studies showed **no association between the MMR vaccine and autism**. Two studies, (Geier and Geier 2003 and 2004) did report a positive association, however, these studies are characterised by serious methodological flaws and their methods were found to be non-transparent, making their results uninterpretable.

The firm view of the committee was to reject any causal relationship between the MMR vaccine and autism. In addition, the committee found that potential biological mechanisms for vaccine-induced autism were only theoretical. The committee is of the opinion that further research, supported by the current state of knowledge, should be directed towards the cause or causes of autism, as well as its treatment. Since the vaccine hypotheses are not presently supported by evidence, a significant investment in resources in this area is not thought to be of value.

Given the lack of direct evidence for a biological mechanism and the fact that well designed epidemiological studies provide evidence of no association between thiomersal and autism, the committee recommended that any cost-benefit assessments regarding the use of thiomersal in vaccines should not include autism as a potential risk.

The committee also acknowledged a recent statement by 10 of the 13 authors of the Lancet research paper by Wakefield and colleagues, confirming their view that the data was not sufficient to prove a causal link between the MMR and autism.

Immunisation Safety Review: Vaccines and Autism
www.nap.edu/openbook/030909237X/html/R1.html

BCG clinics

Please note that interpreters should only be requested for parents/carers attending BCG clinics if their spoken English is very poor. If an interpreter is not usually required for GP or health visitor consultations then there is no requirement for one at the BCG clinic. The PHPU provides a BCG information leaflet in English, Urdu, Punjabi, Cantonese and French. A leaflet in Arabic will be available soon.

These clinics are busy and requests for appointments are becoming more numerous. As a result, there is now a waiting list of ~ 2 months and it is not always possible to arrange urgent appointments.

In view of the high demand, the PHPU is reviewing its current provision of BCG clinics for the under-5s.

Clostridium novyi in an IDU

A teenage injecting drug user (IDU) recently presented to a Glasgow hospital with a buttock abscess but no evidence of severe systemic illness. She gave a history of "muscle popping" with heroin at this site. The abscess was incised and drained and necrotic muscle debrided. Although clinically the presentation is similar to five cases of *Clostridium histolyticum* identified in IDUs in Glasgow over the last six months, *Clostridium novyi* type A was isolated. This is the first report of *Clostridium novyi* infection in an IDU since the outbreak of infection with *Clostridium novyi* type A in Scottish injectors in 2000. These cases highlight an increase in the incidence of infections seen in IDUs who are "muscle-popping".

Hand, foot and mouth disease

This is a vesicular stomatitis with exanthem caused by coxsackievirus group A. Lesions occur on the buccal surfaces of the cheeks and gums and on the sides of the tongue. Papulovesicular lesions occur on the palms, fingers and soles. The PHPU guidance is that nursery and school children should be excluded until skin lesions have disappeared. Pregnant women in contact with index cases should be reassured as there is no adverse consequence for the foetus. **Please note that this infection is not the foot and mouth disease that affects farm animals.**

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These clinics are busy and requests for appointments are becoming more numerous. As a result, there is now a waiting list of ~ 2 months. However, if an urgent appointment is required then PHPU staff will, where possible, try to slot the child into an earlier clinic.

The PHPU's current BCG provision for the under-5s, two per month at each site (Govanhill H.C. and William St), is being reviewed.

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