Group A streptococcal upsurge

There has been an increase in the number of cases of scarlet fever and other presentations of group A streptococcal disease reported to NHS GG&C this winter (as compared to previous years). Scarlet fever is a disease caused by a toxin produced by group A beta haemolytic Streptococcus pyogenes. A significant number of children with severe infection and toxic shock type presentation have required admission to the intensive care unit at the RHSC.

Scarlet fever has an incubation period of 1-4 days and normally evolves from a tonsillar/pharyngeal focus. It has an abrupt onset and is seen in less than 10% of streptococcal throat infections. Approximately 0.3% of untreated cases of streptococcal infection progress to rheumatic fever in normal circumstances, but can range up to 3% during outbreaks. Transmission usually occurs via airborne respiratory particles from infected individuals and also from asymptomatic carriers.

Children between 4 and 8 years of age are in the highest risk group for acquisition of the disease. It is rare in children under age 2 because of the presence of maternal anti-exotoxin antibodies and lack of prior sensitisation. It is estimated that 80% of people over the age of 10 years have developed lifelong protection against streptococcal pyogenic exotoxins.

The typical presentation of scarlet fever is a sore throat, fever (usually above 38.5°C), and a bright red scarlet rash which follows a day or so later. Other symptoms include headache, nausea/vomiting, tachycardia, lymphadenopathy and a bright red tongue with a 'strawberry' appearance. The rash starts as small spots on the neck and chest region.

The initial diagnosis is usually clinical, however the organism can often be demonstrated in throat culture, so throat swabs should be taken from the posterior pharynx, tonsils or areas containing exudate. The antibiotic of choice for treatment is usually penicillin, and if allergic to this antibiotic, erythromycin can be used. It is therefore recommended that any suspected case of scarlet fever should be given a 10-day course of penicillin V following a throat swab.

HPV immunisation seminars

Please note that the PHPU is planning seminars on the Human Papillomavirus vaccine (HPV) for June 2008. All relevant staff will be notified in due course.

Recent TB cases

The Public Health Protection Unit was recently involved in a case of TB diagnosed in a Glasgow primary school teacher. The patient is currently being treated and, as a precautionary measure, all the children who attend the teacher’s school were screened during the last two weeks in February. It is worth noting that screening exercises carried out in Glasgow over recent years in similar circumstances have not found many infections. Letters were sent to all parents providing information, advice and reassurance.

The PHPU is also investigating two children in a family who attend primary school and have pulmonary tuberculosis (TB). Another sibling, also a case, is of pre-school age. These children, currently being treated, are smear negative and are not infectious so there is little risk of other children contracting TB and therefore screening of staff and pupils is not being carried out.

There are around 200 cases of TB in the Greater Glasgow and Clyde area every year and some 400 cases nationally across Scotland.

Close contacts are defined as those who spend around 3-4 hours a day with someone with TB most days of the week.

Revaxis® availability

Immunisation staff may be aware of some recent difficulties accessing Revaxis® vaccine. This was due to Sanofi Pasteur MSD temporarily restricting supplies to conserve stocks. However, the latest information is that all confirmed orders will be filled but a maximum weekly ceiling may be applied. The supply is anticipated to return to normal by the end of this month (March 08).

The supply issue does not affect the school-leaving booster schedule as adequate stocks are available for this programme. For those customers currently supplied with Revaxis® by AAH or Unichem, orders should be clearly marked as “Third Party for Sanofi Supply”.

It should also be noted that tetanus booster following tetanus-prone wounds may not always be required (please refer to p379 of the Green Book) for guidance.

Please note for patients who only need a polio booster for travel, a small supply of Inactivated Polio Vaccine (IPV) is available and can be ordered from Sanofi Pasteur MSD Customer Services Department on 0800 085 9511.
**Mercury Spillage**

The PHPU was recently informed of a mercury spillage in a school. Staff are reminded that small mercury spills from a broken thermometer on flat and non-porous surfaces can be easily cleaned up. If the amount of mercury spilt is greater than the amount in a single thermometer, or if it is difficult to recover all of the spilled mercury, (e.g. if it has penetrated into a carpet) then the contaminated area should be isolated and health & safety/environmental health contacted.

The following guidance should be noted:

- Keep children and pets out of the contaminated area.
- Prior to cleaning up the spill, put on an old set of clothes and shoes, and rubber gloves.
- **Never vacuum the affected area as this will contaminate the machine and result in the airborne release of vapourised mercury.** If a vacuum cleaner became contaminated with mercury the local authority would need to be contacted for information on safe disposal. A mop or broom should **not** be used as these will become contaminated and spread the spill.
- Elemental mercury that has been spilt on a hard surface should be picked up using masking tape, or swept into a glass container with a sealable lid using stiff cardboard to push the beads together. Check a wide area beyond the spill, using a torch to identify as much of the mercury as possible.
- The container, the card board and broken glass should be **double-bagged** for disposal. The local authority should be contacted for information regarding disposal facilities. The room in which the spill occurred should be ventilated and the spill area should not be vacuumed for two weeks.
- If the spill is on upholstery or carpet, the mercury should be collected in a sealable container (see above). **NEVER VACUUM.** If the mercury cannot be retrieved, the area of contaminated upholstery or carpet may need to be removed and disposed of as hazardous waste. If this is the case, the contaminated material should be **double-bagged and the local authority contacted for information on safe disposal**.
- **Do not** use household cleaning products to clean the spill, particularly products that contain ammonia or chlorine such as bleach. These chemicals will react violently with mercury, releasing a toxic gas.
- Elemental mercury that has been spilt down a sink should be removed by dismantling the U-bend (water trap) and collected in a sealable container and disposed of as hazardous waste. Mercury left in the sink U-bend will vapourise on contact with warm water and should therefore be removed to avoid prolonged exposure.
- Clothing that has come into contact with the mercury cannot be dry-cleaned or washed in a washing machine and must be discarded, double-bagged, in the normal household refuse: carefully remove rubber gloves by grabbing them at the wrist and pulling them inside out as they come off, double bag and discard as above.

The Medical Devices Agency (2000) advises that **unless mercury devices are necessary, they should be replaced by aneroid or digital equipment.**

**Measles in travelling people**

The PHPU was recently notified of 2 confirmed cases of measles in travelling people based in NHS Greater Glasgow and Clyde. Both cases live on the same fixed site in Dumbarton and following a visit from a public health doctor, 3 further probable cases were discovered. None of the individuals on site had received MMR vaccine.

These cases in NHS GGC have a direct connection with cases of measles in travelling people based in NHS Lothian. Measles infection has been noted in travelling people in many instances south of the border over the previous months. The common feature is the absence of MMR immunisation.

Measles is a highly infectious diseases and is spread by airborne and droplet transmission. Cases are infectious from the beginning of the prodromal phase (4 days before the rash appears) until 4 days after the appearance of rash. Measles attack rates on non-immune persons in close contact with a case is close to 100%. It is clinically characterised by a prodromal illness followed by fever, coryza, conjunctivitis and cough with a widespread maculopapular rash. The patient is generally miserable (the origin of the name measles is from the Latin “misellus” which means miserable). Complications include pneumonia, otitis media and convulsions with encephalitis occurring rarely (<1/1000 measles cases).

While cases of measles are present in a community, it is possible for infection to occur in any non-immunised individual. The PHPU reminds GPs and primary care staff that 2 doses of MMR should be offered to any unimmunised individual up to the age of 25 years when the opportunity presents itself (one dose if partially immunised). The second dose can be given 1 month after the first. It should be emphasised to those concerned about the vaccine that Dr Wakefield’s paper questioning the safety of the MMR vaccine is now universally discredited.

**Seasonal flu programme 08/09**

Influenza immunisation has now grown to become one of the major public health programmes in the UK. Despite a mild winter and little media attention on flu issues initial data indicate uptake rates of 67% in people aged 65 years and over and 42.9% in those in an ‘at risk’ groups. It is anticipated that the final vaccination uptake figures for 2007/08 which will be produced by NSSS PSD on the basis of end-of-year claim for payment will demonstrate that the target (70%) for the over 65s has been met. The risk groups have not changed for 08/09 although there is an amended definition of ‘carer’.

“A carer is someone, who, without payment, provides help and support to a partner, child, relative, friend or neighbour, who could not manage without help. This could be due to age, physical or mental illness, addiction or disability. A young carer is a child or young person under the age of 18 years carrying out significant caring tasks and assuming a level of responsibility for another person, which would normally be taken by an adult.”

If you would like to comment on any aspect of this newsletter please contact Marie Laurie on 201 4933 or by e-mail marie.laurie@ggc.scot.nhs.uk