To: GPs
A&E clinicians
Paediatricians
Infectious Disease Doctors
Microbiologists
13/03/2015

Dear colleagues,

Re: Increase in scarlet fever notifications 2014/15

We are writing to inform you of a national recent increase in notifications of scarlet fever to Public Health England, above seasonally expected levels. Scarlet fever is a notifiable disease, and we would like to take this opportunity to remind practitioners of the signs and symptoms and the actions to be taken if you see a case.

Signs and symptoms of scarlet fever

Scarlet fever is a common childhood infection caused by *Streptococcus pyogenes*, or group A streptococcus (GAS). The symptoms are non-specific in early illness and may include sore throat, headache, fever, nausea and vomiting. After 12 to 48 hours the characteristic red, generalised pinhead rash develops, typically first appearing on the chest and stomach, rapidly spreading to other parts of the body, giving the skin a sandpaper-like texture. On more darkly-pigmented skin, the scarlet rash may be harder to spot, although the ‘sandpaper’ feel should be present. Patients typically have flushed cheeks and pallor around the mouth. This may be accompanied by a ‘strawberry tongue’. During convalescence desquamation of the skin occurs at the tips of fingers and toes, less often over wide areas of the trunk and limbs. The differential diagnosis will include measles, glandular fever and slapped cheek infections.

Complications of scarlet fever

Although scarlet fever is usually a mild illness, patients can develop complications such as an ear infection, throat abscess, pneumonia, sinusitis or meningitis in the early stages and acute glomerulonephritis and acute rheumatic fever at a later stage. Patients, or their parents, should keep an eye out for any symptoms which might suggest these complications and if concerned advised to seek medical help immediately.

Recommended actions

- Suspected scarlet fever can be confirmed by taking a **throat swab** for culture of Group A streptococcus, although a negative throat swab does not exclude the diagnosis. Consider taking a throat swab in patients with clinically suspected scarlet fever and in children with an undiagnosed febrile illness without an obvious focus of infection.
Prescribe antibiotics without waiting for the culture result if scarlet fever is clinically suspected:

<table>
<thead>
<tr>
<th>Choice</th>
<th>Drug</th>
<th>Age</th>
<th>Dose (by mouth)</th>
<th>Frequency and duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PenicillinV*</td>
<td>&lt;1m</td>
<td>12.5mg/kg (max 62.5mg)</td>
<td>Every 6 hours for 10 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1m to &lt;1yr</td>
<td>62.5mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 to &lt;6yrs</td>
<td>125mg</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>6 to &lt;12yrs</td>
<td>250mg</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>12 to 18yrs</td>
<td>250-500mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adults</td>
<td>500mg</td>
<td></td>
</tr>
<tr>
<td>2**</td>
<td>Azithromycin</td>
<td>6m-&lt;12yrs***</td>
<td>12mg/kg (max 500mg)</td>
<td>Once a day for 5 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12yrs and over</td>
<td>500mg</td>
<td></td>
</tr>
</tbody>
</table>

*For children who are unable to swallow tablets, or where compliance to Penicillin V is a concern, Amoxicillin 50mg/kg once daily (max = 1000 mg) or 25 mg/kg (max = 500 mg) twice daily may be used as an alternative.

**if allergic to penicillin

***unlicensed indication

Advise exclusion from nursery / school / work for 24 hours after the commencement of appropriate antibiotic treatment.

Notify your Health Protection Team
Clinicians should be mindful of a potential increase in invasive GAS (iGAS) infection which tends to follow trends in scarlet fever. Although such an increase is not yet evident above the expected level for this season it is important to maintain a high index of suspicion, especially in relevant patients (such as those with chicken pox, and women in the puerperal period).
Early recognition and prompt initiation of specific and supportive therapy for patients with iGAS infection can be lifesaving.

Yours sincerely,

[Signature]

Acting Deputy Director – Health Protection
Cumbria & Lancashire PHEC

Resources: