Public Health England

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22nd February 2018

To: General Practitioners in London

Dear colleagues,

Re: Increase in scarlet fever notifications

I am writing to inform you of a national increase in notifications of scarlet fever to Public Health England, above seasonally expected levels. Scarlet fever is a notifiable disease, and I 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 to:

  i) assist with differential diagnosis,

  ii) if you suspect that the patient may be part of an **outbreak**

  iii) if the patient is allergic to penicillin or

  iv) in regular contact with vulnerable individuals (e.g. healthcare worker)

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- **Prescribe antibiotics** without waiting for the culture result if scarlet fever is clinically suspected:

Choice	Drug	Age	Dose (by mouth)	Frequency and duration
1	Penicillin V*	<1m	12.5mg/kg (max 62.5mg)	Every 6 hours for 10 days
		1m to <1yr	62.5mg	
		1 to <6yrs	125mg	
		6 to <12yrs	250mg	
		12 to 18yrs	250-500mg	
		Adults	500mg	
2	Azithromycin**	6m-<12yrs***	12mg/kg (max 500mg)	Once a day for 5 days
		12yrs and over	500mg	

*For children who are unable to swallow tablets, or where compliance to Penicillin V is a concern, Amoxicillin 50 mg/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, including information on the school/nursery attended if relevant.

  Clinicians should be mindful of a potential increase in **invasive GAS (iGAS)** infection which can follow trends in scarlet fever. It is important to maintain a high index of suspicion, especially in relevant patients (such as those with **chickenpox**, 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,

Deborah Turbitt

Dr Deborah Turbitt, Deputy Regional Director for Health Protection, PHE London