



MINISTRY OF HEALTH
SINGAPORE

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All Registered Medical Practitioners

MOH CIRCULAR 17/2011
ALERT: SCARLET FEVER IN HONG KONG

The Hong Kong Centre for Health Protection (HK CHP) has reported a surge in the number of scarlet fever cases in Hong Kong, with a total of 494 cases reported up to 22 June 2011. This surpassed their annual number of cases recorded in the past decade, and was more than three times that for the whole of last year. Similar increases in number of cases have also been reported in Mainland China and Macau. The majority of cases was under 10 years of age and most had mild symptoms. Two deaths have been reported in a 5-year-old boy and a 7-year-old girl. Both patients presented with clinical features of scarlet fever and later developed toxic shock syndrome. Institutional outbreaks have also been reported in kindergartens/child care centres, schools and residential settings in Hong Kong.

2. The causative organism was identified as Group A streptococcus (GAS) of serotype M12. According to antibiotic resistance surveillance data published by HK CHP, about 50% of GAS isolated in 2011 was resistant to erythromycin or clindamycin. All GAS isolates were sensitive to penicillin. In view of the high proportion of macrolide-resistant GAS in the current Hong Kong outbreak, medical practitioners in Hong Kong have been advised by HK CHP to use penicillin or first generation cephalosporin as empirical treatment, instead of macrolide antibiotics.

CLINICAL FEATURES AND MANAGEMENT

3. Scarlet fever is caused by GAS and is transmitted through inhalation of airborne droplets infected with the bacteria or direct contact with an infected individual. The incubation period of scarlet fever generally ranges from one to four days. Symptoms usually appear abruptly, such as a sudden onset of fever which is associated with sore throat, headache, nausea, vomiting, abdominal pain, myalgias, and malaise. The rash of scarlet fever is usually seen in children under the age of 18 years, and typically appears 12-48 hours after the onset of fever.

4. Common features of scarlet fever may include, but are not limited to, the following:

- A very red, sore throat
- A fever (38°C or above)
- A red rash with a sandpaper feel
- Bright red underarm, elbow and groin skin creases

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- A whitish coating on the tongue or back of the throat
- A "strawberry" tongue
- Headache
- Nausea and/or vomiting
- Swollen glands
- Body aches

5. Scarlet fever is usually a mild illness but it needs to be treated with antibiotics to prevent rare but serious complications. Fever usually abates within 12-24 hours after initiation of appropriate antibiotic therapy and most patients recover after four to five days after treatment is started. Penicillin or amoxicillin is the first choice agent for scarlet fever. For patients allergic to penicillin, a first generation cephalosporin such as cefalexin may be considered. Macrolides and clindamycin should be used with caution if resistance to macrolides is suspected.

ADVISORY

6. We seek your cooperation to be alert to possible cases of scarlet fever in children and adults returning from overseas travel, especially from Hong Kong, Macau and Mainland China.

7. To prevent transmission, patients should be advised to maintain good personal and environmental hygiene, practise proper hand hygiene by washing hands regularly and thoroughly, observe respiratory etiquette (including covering their nose and mouth while sneezing or coughing), and maintain good ventilation in their living environments. Children with scarlet fever should not attend schools or child care centres until they have fully recovered.

8. Members of the public, especially those travelling to Hong Kong or other areas with reported outbreaks of scarlet fever, should be advised to observe the good hygiene and to avoid overcrowded places, where possible.

9. The latest information on the scarlet fever situation in Hong Kong, Mainland China and Macau can be found on the MOH website at www.moh.gov.sg.

10. We look forward to your co-operation and assistance in this matter. For any clarification, please e-mail moh_info@moh.gov.sg.



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