

本署檔號 Our Ref. : (2) in DH SEB CD/8/50/1 Pt.2

20 January 2012

Dear Doctor,

Two Cases of Scarlet Fever Complicated with Toxic Shock Syndrome

We would like to provide an update on scarlet fever (SF) in Hong Kong. Two SF cases complicated with toxic shock syndrome (TSS) were recorded on January 19, 2012, involving one which was fatal while the other is currently in paediatric intensive care unit (PICU). The case histories of the two cases are attached in the Annex.

While further investigations including further laboratory analysis are being carried out for these two reported cases, we would like to draw your attention to that although scarlet fever mainly affects children between 2 to 8 years of age but children of older age group and adults may also be affected as in the above two cases.

According to local surveillance of antibiotic resistance, around 50-60% of GAS isolated in 2011 are **resistant to erythromycin (which also predicts resistance to azithromycin and clarithromycin)** while all GAS isolates are **sensitive to penicillin**. Hence, antibiotics belonging to the macrolide group (e.g., erythromycin) should not be used for treatment of patient presenting with symptoms and signs of GAS infection or SF while penicillin or a first generation cephalosporin should be given as early as possible. Children suspected to have GAS infection should be monitored closely for the development of more serious complications such as SF or TSS.

While the scarlet fever activity had decreased from the upsurge since July last year, there are recent signs of increased activity again in the recent two months. The weekly number of scarlet fever has increased from 10 to 32 in August to October to 15 to 49 in the recent two months. In Hong Kong, relatively more cases occurred from December to May though this seasonal pattern might not be seen every year. We are expecting more scarlet fever cases in the coming few months.



SF is a statutorily notifiable disease and please report SF cases to our Central Notification Office (Tel: 2477-2772; Fax: 2477-2770; CENO On-line: <http://www.chp.gov.hk/ceno>) for prompt epidemiological investigations and control measures.

We would also like to seek your assistance in providing the following health advice to your patients:

- Maintain good personal and environmental hygiene;
- Keep hands clean and wash hands properly;
- Wash hands when they are dirtied by respiratory secretions, e.g., after sneezing;
- Cover nose and mouth while sneezing or coughing and dispose of nasal and mouth discharge properly;
- Keep good ventilation; and
- Patients who are suffering from scarlet fever should not go to schools or child care centres until they fully recover.

Yours faithfully,



(Dr. S K CHUANG)

For Controller, Centre for Health Protection
Department of Health

**Case histories of the two cases of Scarlet Fever
complicated with Toxic Shock Syndrome reported to CHP
on January 19, 2012**

Case 1

The first one is a fatal case involving a 14-year-old girl with good past health. She presented with on and off low grade fever since January 6, associated with cough, runny nose and malaise. The girl sought medical consultation from three different private clinics for five times from January 6 to 17. Her condition did not improve and she developed rapid breathing since January 17 and attended the Accident and Emergency Department of Pamela Youde Nethersole Eastern Hospital early next morning. She was admitted to PICU with septic shock, pneumonia and pleural effusion. Her condition deteriorated and she passed away later in the same day. Her pleural aspirate specimen tested positive for *Streptococcus pyogenes* (Group A). The girl lived with her parents and a younger brother in Eastern District. Her mother and younger brother had recent upper respiratory infection symptoms. Swabs will be taken from them for further tests. The girl used to study at a secondary school in Happy Valley and last attended school on January 16. There has been no report of outbreak of respiratory illness in the school. As a precautionary measure, the school is advised to suspend class on January 20 for thorough cleansing and disinfection. She did not travel outside Hong Kong before onset of symptoms but travelled to Macau from 7-8 January.

Case 2

The second case involves an 11-year-old boy with good past health. He presented with cough and runny nose since January 8 and developed fever since January 13. He was admitted to a private hospital on January 15. Group A streptococcus was isolated from his blood specimen. The isolate is sensitive to penicillin but resistant to erythromycin. He was transferred to Paediatric Intensive Care Unit of Pamela Youde Nethersole Eastern Hospital on January 17. On the same day, he also developed generalised sandpaper-like skin rash. He is now in stable condition. He is studying in a primary school in Wanchai District. He last attended school on January 13. The school will start holiday on 20 January and as a precautionary measure, the school is advised to carry out thorough cleansing and disinfection. The patient has no recent travel history. His home contacts are asymptomatic.