APPENDIX I

December 2015

Post Arrival Tuberculosis Assessment of Syrian Refugee Children

Pre-arrival assessment

It is intended that as part of the Immigration Medical examination, all children 11 years and older should undergo Chest X-ray examination in the country of origin. All children who are symptomatic should also be assessed for active tuberculosis. All cases detected with active tuberculosis will be assessed and treated until no longer infectious before arriving to Canada. Neither tuberculin skin testing (TST) nor interferon gamma release assay (IGRA) are routinely done on newcomers to Canada.

Epidemiology

The estimated incidence rates of tuberculosis in Syria before the current conflict were approximately 16 per hundred thousand persons. This contrasts with Canada’s rate of 4.6/100,000, Toronto’s rate of 10 /100,000 and the global rate of 115-120/100,000. Rates may have significantly increased in refugee camps, but there are scant data and it is likely that Syria remains a lower TB-burden country. The immunization policy in Syria includes BCG at birth.

Screening

Routine screening with tuberculin skin tests in this lower risk population especially in younger children who have had BCG is likely to produce a number of positive tests that are false positives. In general, a positive test might trigger the need for chest radiograph, but asymptomatic children with positive tuberculin skin tests and normal x-rays should not be “isolated” or labelled as potentially infectious; this would create much unnecessary anxiety and potential stigmatization. Given the lower rate of TB, the potential for false positive results and in line with updated Canadian Collaboration for Immigrant and Refugee Health Guidelines (CMAJ Dec 2015); we do not suggest screening Syrian refugee children for latent TB. Further guidance will be informed by active surveillance.

Active Tuberculosis

Nonetheless, active tuberculosis disease may occasionally occur and is important to detect. All refugees should be asked about past TB diagnosis and treatment as part of their medical history. For diagnosis of active tuberculosis the most important tests are samples, especially sputum sent for TB smear and culture. Induced sputa are better than spontaneously expectorated sputum in terms of yield, but expectorated sputum or should be sent if available.
Three specimens are better than one: the intervals between tests can be as short as an hour. If you’re looking for TB, don’t request “C&S” as only bacterial cultures will be done.

Hallmarks of tuberculosis in the adolescent and adult may include prolonged fever, night sweats, weight loss and cough. Upper lobe airspace disease in an older child, adolescent or adult, especially with a prolonged cough always increases suspicion for TB, but any airspace disease can be due to TB.

In younger children presentation of TB can be protean. Symptoms are often nonspecific. The classical symptoms of night sweats and weight loss are rare. Intrathoracic lymphadenopathy, both hilar and mediastinal are hallmarks of pediatric TB.

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