

its implementation in 1993. Although the sensitivity of the algorithm was only 61% during the first 24 hours of hospitalization, an additional five case-patients should have been placed in NPIRs at the time of admission had the algorithm been used correctly (potential sensitivity, 77%). The usefulness of the algorithm could be improved by increasing the index of suspicion of TB for any patient with an abnormal chest radiograph, especially the elderly, and promptly initiating an appropriate diagnostic evaluation.

Even if the algorithm is applied appropriately, nonclinical HCWs in the emergency room and clinic waiting areas may be exposed to patients at risk of TB before the diagnostic evaluation is initiated. Therefore, to limit the exposure of all HCWs to patients at risk of TB, we currently are designing an algorithm for use in the emergency department and ambulatory settings. This algorithm incorporates a simplified assessment of TB risk and may be performed by nonclinical HCWs.

REFERENCES

1. Ellner JJ, Hinman AR, Dooley SW, et al. Tuberculosis symposium: emerging problems and promise. *JAMA* 1993;168:537-551.
2. Barnes PF, Barrows SA. Tuberculosis in the 1990's. *Ann Intern Med* 1993;119:400-410.
3. Gordin F. Tuberculosis control: back to the future? *JAMA* 1992;267:2649-2650.
4. Snider DE Jr, Roper WL. The new tuberculosis. *N Engl J Med* 1992;326:703-705.
5. Hopewell PC. Impact of human immunodeficiency virus on the epidemiology, clinical features, management, and control of tuberculosis. *Clin Infect Dis* 1992;15:540-547.
6. Brudney K, Dobkin J. Resurgent tuberculosis in New York City: human immunodeficiency virus, homelessness and the decline of tuberculosis control programs. *Am Rev Respir Dis* 1991;144:745-749.
7. OSHA enforcement policy: procedures for occupational exposure to tuberculosis. *Infect Control Hosp Epidemiol* 1993;14:694-699.
8. Centers for Disease Control and Prevention. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care facilities, 1994. *MMWR* 1994;43(RR-13):1-132.
9. Centers for Disease Control. Guidelines for preventing the transmission of tuberculosis in health-care settings, with special focus on HIV-related issues. *MMWR* 1990;39(RR-17):1-29.
10. Garner JS, Simmons BP. Guidelines for isolation precautions in hospitals. *Infect Control* 1983;4:245-325.
11. Centers for Disease Control and Prevention. *Core Curriculum on Tuberculosis: What the Clinician Should Know*. 3rd ed. Atlanta, GA: US Public Health Service; 1994:7, 53-54.
12. Centers for Disease Control. Nosocomial transmission of multidrug-resistant tuberculosis among HIV-infected persons—Florida and New York, 1988-1991. *MMWR* 1991;40:585-591.
13. Pearson ML, Jereb JL, Frieden TR, et al. Nosocomial transmission of *Mycobacterium tuberculosis*: a risk to patients and health-care workers. *Ann Intern Med* 1992;117:191-196.
14. McGowan JE. Resurgent nosocomial tuberculosis: consequences and actions for hospital epidemiologists. *Infect Control Hosp Epidemiol* 1992;13:575-578.
15. Nicas M, Sprinson JE, Royce SE, et al. Isolation rooms for tuberculosis control. *Infect Control Hosp Epidemiol* 1993;14:619-622. Editorial.
16. Neill HM. Isolation-room ventilation critical to control disease. *Health Facilities Management* 1992;9:30-38.
17. American Thoracic Society, Centers for Disease Control. Diagnostic standards and classification of tuberculosis. *Am Rev Respir Dis* 1990;142:725-735.
18. Pitchenik AE, Rubinson HA. The radiographic appearance of tuberculosis in patients with the acquired immune deficiency syndrome (AIDS) and pre-AIDS. *Am Rev Respir Dis* 1985;131:393-396.
19. Chaisson RE, Schecter GF, Theuer CP, et al. Tuberculosis in patients with the acquired immunodeficiency syndrome. *Am Rev Respir Dis* 1987;136:570-574.
20. Klein NC, Duncanson FP, Lenox TH III, et al. Use of mycobacterial smears in the diagnosis of pulmonary tuberculosis in AIDS/ARC patients. *Chest* 1989;95:1190-1192.

Group A Strep Cross-Infection

Gina Pugliese, RN, MS
Martin S. Favero, PhD
 Medical News Editors

Streptococcus pyogenes can cause a variety of diseases ranging from mild pharyngitis to severe toxic shock syndrome (TSS) and acute rheumatic fever. In the last 10 years, there has been a resurgence of severe group A streptococcal infections including TSS, necrotizing fasciitis, and myositis.

Dr. J.R. Dipersio and coinvestigators from Summa Health Systems in Akron, Ohio, described two set-

tings where group A streptococci infections were transmitted among family members and healthcare workers. The first cluster involved two family members (one had TSS, and one had necrotizing fasciitis) and three healthcare workers who cared for one of the index patients and subsequently developed a pharyngitis infection. The second cluster included a mother who had necrotizing fasciitis of the hand and transmitted infection to her three children. Group A streptococci were isolated within both clusters and were common serotype and had identical fingerprints, as determined by pulsed-field gel electrophoresis.

These clusters of Group A streptococcal infections underscore the potential from transmission of serious group A streptococcus disease among individuals in a home or healthcare setting and the need for healthcare workers to use standard barrier precautions for protection against drainage and secretions from infected patients.

FROM: DiPersio JR, File P, Stevens D, et al. Spread of serious disease-producing M3 clones of group A streptococcus among family members and healthcare workers. *Clin Infect Dis* 1996;22:490-495.