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Scrofula

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A 25 year-old hitherto healthy female Asian immigrant presented with gradually worsening painful neck swelling for 5 weeks and a 40-pound weight loss. Neck examination showed tender, firm, matted and fixed lymph nodes in left and right cervical chains. Contrast computed tomography of the neck confirmed extensive necrotic lymphadenopathy. Excisional lymph node biopsy revealed granulomatous lymphadenitis with microabscesses. Staining for acid-fast bacilli was positive; tissue culture confirmed the diagnosis of *Mycobacterium tuberculosis*. She was started on rifampin



FIGURE 1. Enlarged Lymph Nodes.



FIGURE 2. Necrotic Lymph Nodes.

600 mg, isoniazid 300 mg, pyrazinamide 1000 mg, and ethambutol 800 mg; ethambutol was discontinued when the mycobacteria proved susceptible to isoniazid. Pyrazinamide was discontinued after 2 months and isoniazid and rifampin continued to complete 6 months of therapy.

Tuberculous lymphadenitis—scrofula when occurring in the cervical region—is a common cause of extrapulmonary tuberculosis, especially in developing countries. In developed countries, tuberculous lymphadenitis occurs mainly in immigrants but can also arise in travelers to endemic areas and immunodeficient persons.¹ Painless lymphadenopathy of the superficial lymph nodes is typical. Fine needle aspiration with microscopy, culture and polymerase chain reaction (PCR) may be used as an initial diagnostic tool.² However, if the results are negative despite high clinical suspicion, excisional biopsy of the lymph node may be necessary. Various nontuberculous mycobacteria also cause adenitis, so definitive speciation is needed to determine optimal therapy.³

Recommended initial treatment for *M. tuberculosis* includes isoniazid, rifampin, pyrazinamide and ethambutol or streptomycin, based on local resistance patterns. The fourth drug is withdrawn when the isolate is found susceptible to the first 3 drugs; isoniazid and rifampin are used for a total of 6 months of treatment, while pyrazinamide is withdrawn after 2 months.⁴ Twice-weekly directly observed therapy (DOT) can be as effective as daily therapy supervised weekly.⁵ DOT maximizes compliance and reduces treatment failure.

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