Pleural Nocardiosis in Immunocompetent Patient

Sir,

Pleural and pulmonary infections are very common in developing countries. Isolated pleural infection with *Nocardia* is very rarely seen. *Nocardias* are widely distributed in environment and play a part in decomposition of organic matter. They can cause significant morbidity and mortality in immunocompromised individuals as opportunistic pathogens and sometimes may also cause infection in immunocompetent persons. *Nocardias* are gram positive, weakly acid fast, branching bacteria that can cause local or disseminated disease. Pleural involvement in Nocardiosis is very rare. *Nocardias* belong to aerobic actinomycetes class, and are branching filamentous in shape under the microscope. Corticosteroid therapy has been reported as the commonest predisposing factor for pulmonary *Nocardia*. In any undiagnosed case of pleural disease on prolonged steroid therapy, routine screen for *Nocardia* should be done by incubating the cultured clinical specimens for at least one week.

A 40-year male resident of Dadu, police constable by profession, presented with 4 weeks' history of left sided, non-radiating pleuritic chest pain. He also reported exertional breathlessness for one week. There was no history of cough, fever or weight loss. The patient had been on oral prednisolone for 2 months for focal segmental glomerulosclerosis, diagnosed on renal biopsy, 4 months ago.

General physical examination was unremarkable. Chest examination findings were in keeping with moderate sized left pleural effusion.

Total leukocytes count was 18.6x10^9/ml with 86% neutrophils. Erythrocyte sedimentation rate in first hour was 140 mm. Blood chemistry was normal. Chest radiograph confirmed pleura effusion. CT scan showed moderate left sided pleural effusion with septation. Pleural fluid was exudative with predominant (90%) lymphocytes. Pleural fluid cytology was negative for malignant cells.

On microscopic examination, gram positive, branching rods (partial acid fast positive), were seen on smear. *Nocardia* species were grown in pleural fluid culture. Tube thoracostomy and intravenous antibiotic were offered. Despite persuasion, patient declined for tube thoracostomy and only agreed to take oral antibiotics. As a compromise, he was treated with sulfa methoxazole and ciprofloxacin, based on sensitivity results from pleural fluid culture. On regular OPD follow-up, he continued to improve clinically and pleural effusion resolved in 4 months on dual antibiotic therapy.

REFERENCES