Predictive Factors of Poor Lung Function in Cured Tuberculosis Patients

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Objective: To evaluate clinical factors that can influence the results of spirometry in cured tuberculosis patients.

Design: Measurement of spirometry in treated tuberculosis patients with review of patient’s records for duration of symptoms, chest radiography and residual changes within five years of completion of anti-tuberculosis therapy.

Setting: Sahary Chest Hospital, Riyadh, Saudi Arabia

Results: Forty-six patients were studied (23 males, 23 females). Forced Vital Capacity (FVC), Forced Expiratory Volume at end /1 Sec (FEV₁) and ratio of FEV₁/FVC were abnormal in 13 cases, and oxygen saturation was less than 90% in three cases. Significantly higher rate of abnormal spirometry was observed in patients with poor compliance (poor 58.3% Vs good 17.6%), patients with duration of treatment less than 6 months (<6m 53.3% Vs ≥6m 16.1%), and patients with advanced lung damage (advanced 38.5% Vs mild 10%).

Conclusion: Poor compliance with the prescribed drug regimen, and significant lung damage seen on radiography were found to adversely affect the degree of loss of lung function. Furthermore, lung functions appear to improve with time, and the longer the duration of recovery from tuberculosis.