Pulmonary Hypertension in Patients with Treated Pulmonary Tuberculosis: Analysis of 14 Consecutive Cases

AH Ahmed 1,2 , AS Ibrahim 3 , SM Elshafie 2

1Department of Medicine, University of Khartoum, Khartoum, Sudan
2Department of Respiratory Medicine, Elshaab Teaching Hospital, Khartoum Sudan
3Department of Cardiology, Elshaab Teaching Hospital, Khartoum Sudan

Background
Pulmonary tuberculosis (PTB) is an increasing global health problem that continues to cause significant morbidity and mortality. The impact of PTB has been measured in terms morbidity and mortality and little attention has been paid to continuing respiratory disability in those who are cured. Pulmonary hypertension (PHT) is a serious respiratory disability that results from structural lung damage and chronic hypoxia. This study was conducted to investigate the presence of PHT in a cohort of treated PTB patients who presented with shortness of breath.

Methods
This is a cross-sectional study that included 14 consecutive patients who were cured from PTB and presented with shortness of breath. Demographic and clinical data were recorded for all patients. PHT was diagnosed using Doppler echocardiography.

Results
14 patients who were treated from PTB and were found to have PHT were studied. All patients were sputum smear negative at the time of the study. The mean age (SD) was 43.1 (13.6) and half of the patients were males. The mean number of years since PTB was diagnosed (SD) was 9.4 (10.9). All patients had abnormal chest x-rays. The commonest radiological abnormality was fibrocavitation which occurred in 50% of patients. Estimated pulmonary artery systolic pressure (PASP) of 51 to 80 mm/Hg was found in 9 patients (64.3%) whereas PASP of 40 to 50 mm/Hg was found in 4 patients (28.6%) and one patient had PASP more than 80 mm/Hg.

Conclusions
Different grades of PHT occurred in this cohort of treated PTB patients on average about 9 years after cure. The findings of this study support implementation of strategies for early detection and prevention of PTB. For those who were cured from PTB, longer periods of disability should be included in assessment of disease burden.