**Title:** Postural changes in children with non-cystic fibrosis bronchiectasis

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**Body:** Bronchiectasis not caused by cystic fibrosis (CF) is often perceived to be rare in western societies, but remains an important cause of chronic suppurative lung disease in the developing world among children. Although, the clinical features, radiological, and histological findings in these children was investigated there is not enough knowledge about the musculoskeletal consequences of the disease. Therefore the aim of this study is to document the musculoskeletal affects of the disease process. 24 patients with non-CF bronchiectasis (mean age 13.2(3.4) years) participated in the study. Anterior, posterior and lateral postural analyses was performed and thoracic kyphosis angle was measured from lateral chest X-Rays. 4 (16.7%) patients had kyphosis (over 35 degrees) and mean angle of thoracic curve was 28.5(5.1) degrees. There was scoliosis in 3 (12.5 %) of the children. Bilateral pes planus was present in 8 (33.3 %) patients. There was barrel chest deformity in 7 (29.2 %), pectus carinatum deformity in 2 (8.3 %) and pectus excavatum deformity in 4 (16.7 %) patients. 17 (70 %) patients had also protracted shoulders. Our results indicate a high rate of postural deformities or adaptations especially in the upper body of the patients with non-CF bronchiectasis. Since the upper body posture is carefully related to the pulmonary functions these changes should be closely monitored as soon as the patients are diagnosed and necessary preventive and corrective physiotherapy programs must be initiated.