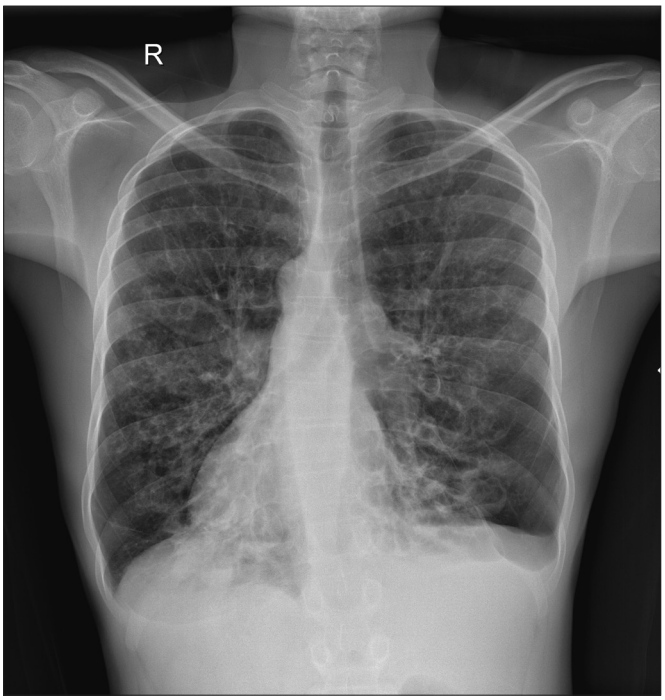
Is the heart pointing toward the diagnosis?

S D Maasdorp, MB ChB, MMed (Int), FCP (SA), Cert Pulmonology (SA) Phys

Department of Internal Medicine, Faculty of Health Sciences, University of the Free State, South Africa
maasdorpsd1@ufs.ac.za

A 31-year-old male presented with complaints of nasal congestion, dyspnea, a productive cough and recurrent episodes of lower respiratory tract infection requiring antibiotics since the age of 17 years old. A chest x-ray revealed dextrocardia and bronchiectasis, in keeping with a diagnosis of Kartagener syndrome. Primary ciliary dyskinesia is an autosomal recessive disorder resulting from genetic defects of cilia leading to impaired ciliary motility and function.[1] Decreased mucociliary clearance and mucus retention results in recurrent otitis media, chronic sinusitis and repeated lower respiratory tract infection, but is also associated with impaired fertility and abnormal rotation of visceral organs during embryological development. Kartagener syndrome is diagnosed if situs inversus, chronic sinusitis and bronchiectasis occur together in the same patient.[1] Diagnostic tests that can assist in the diagnosis of primary ciliary dyskinesia include low nasal nitric oxide levels, high-speed video microscopy analysis, transmission electron microscopy of nasal or bronchial mucosa, and gene mutation analysis.[2]



1. Ibrahim R, Daood H. Kartagener syndrome: A case report. Can J Respir Ther 2021;21(57):44-48. https://doi.org/10.29390%2Fcjrt-2020-064
2. Wei S, Xie H, Cheng Y. Progress in diagnosis of primary ciliary dyskinesia. J Paediatr Child Health 2022;58(10):1736-1740. https://doi.org/10.1111/jpc.16196