Pulmonary artery sling and tracheal bronchus in an infant with severe respiratory distress

Ciddi solunum sıkıntısı olan bir bebekte pulmoner arter slingi ve trakeal bronş

A 19-month-old girl was admitted to our clinic with complaints of dyspnea and cough. Her medical history revealed that she had been hospitalized with a diagnosis of bronchiolitis and/or bronchopneumonia for five times during the last year. On physical examination her weight was 8 kg (<3rd percentile), height was 78 cm (10th percentile), she was tachypneic, tachycardic, and she had stridor, suprasternal retractions and coarse crackles over both hemithorax. Echocardiography revealed that the left pulmonary artery (LPA) was originating distal to its normal position, which was consistent with pulmonary artery sling (Fig. 1). Multislice computed tomography demonstrated that the LPA arose from the posterior aspect of the right pulmonary artery and encircled the trachea (Fig. 2). Also, right-upper-lobe bronchus was arising from the

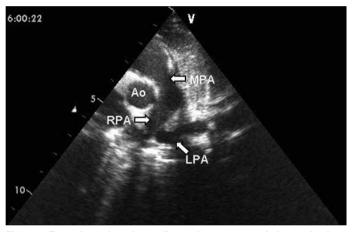


Figure 1. Transthoracic echocardiography, parasternal short axis view shows left pulmonary artery originating distal to its normal position Ao - aorta, LPA - left pulmonary artery, MPA - main pulmonary artery, RPA - right pulmonary artery

right lateral wall of the trachea above the carina (tracheal bronchus, Fig. 3). Because the sling structure was compressing the trachea and causing severe respiratory distress, she underwent left pulmonary arteriopexy operation. The patient's postoperative course was uneventful and all the respiratory symptoms resolved after the operation. Echocardiography indicated a mild stenosis of LPA which was causing 17 mmHg peak gradient at the level of anastomosis (Fig. 4).

Abdullah Kocabaş, Fırat Kardelen, Gayaz Akçurin, Halil Ertuğ Division of Pediatric Cardiology, Department of Pediatrics, Faculty of Medicine, Akdeniz University, Antalya-*Turkey*

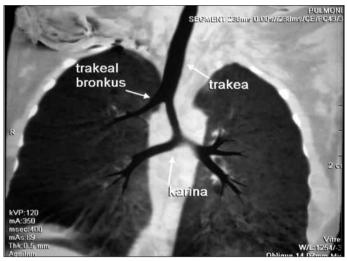
Address for Correspondence/Yazışma Adresi: Dr. Abdullah Kocabaş, Akdeniz Üniversitesi Tıp Fakültesi, Pediyatrik Kardiyoloji Bilim Dalı, Antalya-*Türkiye* Phone: +90 242 249 65 45

E-mail: dr.akocabas@gmail.com

Available Online Date/Çevrimiçi Yayın Tarihi: 10.09.2013

© Telif Hakkı 2013 AVES Yayıncılık Ltd. Şti. - Makale metnine www.anakarder.com web sayfasından ulaşılabilir.

©Copyright 2013 by AVES Yayıncılık Ltd. - Available online at www.anakarder.com doi:10.5152/akd.2013.222



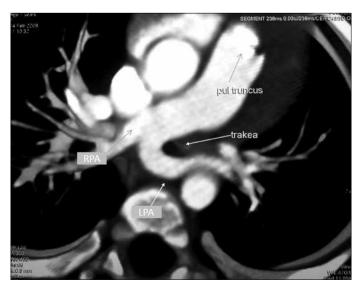


Figure 2. Multislice CT image shows the LPA originating from the posterior aspect of the RPA and encircling the trachea CT- computed tomography, LPA- left pulmonary artery, RPA- right pulmonary artery

Figure 3. Multislice computed tomography image demonstrating right tracheal bronchus

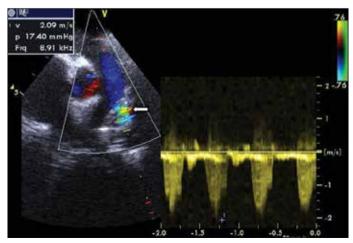


Figure 4. Postoperative transthoracic echocardiographic parasternal short axis view shows mild left pulmonary artery stenosis at the level of anastomosis line (arrow)