Anadolu Kardiyol Derg
2009; 9: 518-21

ventral wall anomalies. Incomplete expression (class 3) is defined as various combination of abnormalities including sternal defect. Our patient was in class 1.

Antenatal diagnosis is important to organize neonatal, cardiovascular, and pediatric surgery team. Fetal-early postnatal cardiac and systemic evaluation for associated anomalies is necessary to determine surgery and assess prognosis. Diagnosis of our patient could be possible after delivery.

Life expectancy varies with site of ectopic heart and associated abnormalities (1-4). In a review, presence of intracardiac defects in EC may favor the prognosis that seemed to be poorer in complete PC and coexisting abnormalities (2). Correction of ventral hernia, diaphragmatic defects, and associated abnormalities is main treatment. Our patient died before surgery.

In conclusion, PC is rare anomaly and antenatal diagnosis is the most important point to be emphasized.

**Sevim Ünal, Fatma Çakmak Çelik, Eda Özaydın*,
Ayper Kaçar**, Nazlıhan Günal[1]
From Neonatal Intensive Care Unit, Departments of *Pediatrics and **Pathology Republic of Turkey Ministry of Health Ankara Dışkapı Children's Health Training and Research Hospital, Dışkapı, Ankara,
[1]Department of Pediatric Cardiology, Faculty of Medicine, Ondokuz Mayıs University, Samsun, Turkey**

References

1. Leca F, Thibert M, Khoury W, Fermont L, Laborde F, Dumez Y. Extrathoracic heart (ectopia cordis). Report of two cases and review of the literature. Int J Cardiol 1989; 22: 221-8.
2. Amato JJ, Zelen J, Talwalkar NG. Single-stage repair of thoracic ectopia cordis. Ann Thorac Surg 1995; 59: 518-20.
3. Cantrell JR, Haller JA, Ravitch MM. A syndrome of congenital defects involving the abdominal wall, sternum, diaphragm, pericardium, and heart. Surg Gynecol Obstet 1958; 107: 602-14.
4. Toyama WM. Combined congenital defects of the anterior abdominal wall, sternum, diaphragm, pericardium and heart. A case report and review of the syndrome. Pediatrics 1972; 50: 778-86.

Address for Correspondence/Yazışma Adresi: Dr. Fatma Çakmak Çelik,
Republic of Turkey Ministry of Health Ankara Dışkapı Children's Health Training and Research Hospital, Department of Pediatrics, Neonatal Intensive Care Unit, Dışkapı, Ankara, Turkey
Phone: +90 312 596 97 34 Fax: +90 312 347 23 30
E-mail: clkfatma@yahoo.com

Idiopathic twin aneurysm of right pulmonary artery diagnosed in a case 17 years after a successful surgical repair of ventricular septal defect

Başarılı ventriküler septal defekt onarımı gerçekleştirilmiş olguda 17 yıl sonra bulgulanan idiyopatik sağ pulmoner arter ikiz anevrizması

Pulmonary artery aneurysm is rarely seen in clinical practice (1). Aneurysm of pulmonary artery is relatively rare clinical finding, and appears mostly in association with significant cardiovascular or pulmonary abnormalities and is frequently caused by pulmonary hypertension (2). Different etiologies have been reviewed, but idiopathic lesions without other symptoms are seldom reported (3).

Our case was a 27-year-old male. He had undergone ventricular septal defect (VSD) repair in our clinic when he was 10 years old. Late period follow-up was event-free. He was referred to our clinic after the chest roentgenogram taken in another health facility due to upper respiratory tract infection. An abnormal shadow at right hilus region had been pointed out on the chest X-ray film (Fig. 1). On physical examination, the patient appeared generally well. Computed tomographic (CT) scan of the chest revealed a dilation of right pulmonary artery consistent with aneurysm at the level of hilus. Transthoracic echocardiography revealed no pathological finding and it was particularly reported that pulmonary arterial pressure and pulmonary valve were normal (Fig. 2). Thorax angiography with multislice CT of our case showed fusiform aneurysmal dilations of 18x20x38 mm at lobar branch and of 23x28x33 mm at middle lobar branch of right pulmonary artery (Fig. 3). With these findings, he was debated at our clinical council. Since he was asymptomatic and structure of pulmonary valve and pressure values were within normal limits, annual outpatient follow-up with thorax CT was recommended.

Aneurysm formation of the pulmonary artery has been reported to develop in patients due to several underlying etiologies. However, the natural history is not yet defined, and management remains controver-

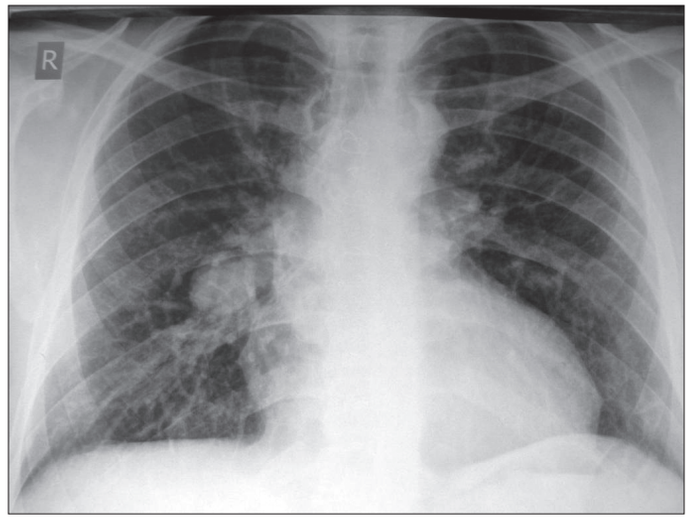

Figure 1. Chest X-ray of our case showing abnormal shadowing in the right pulmonary hilus

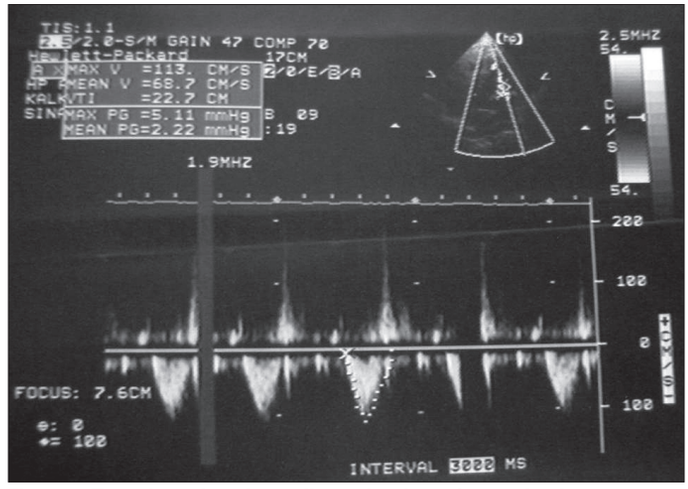

Figure 2. Transthoracic echocardiography view of normal pulmonary arterial pressure and structure of pulmonary valve

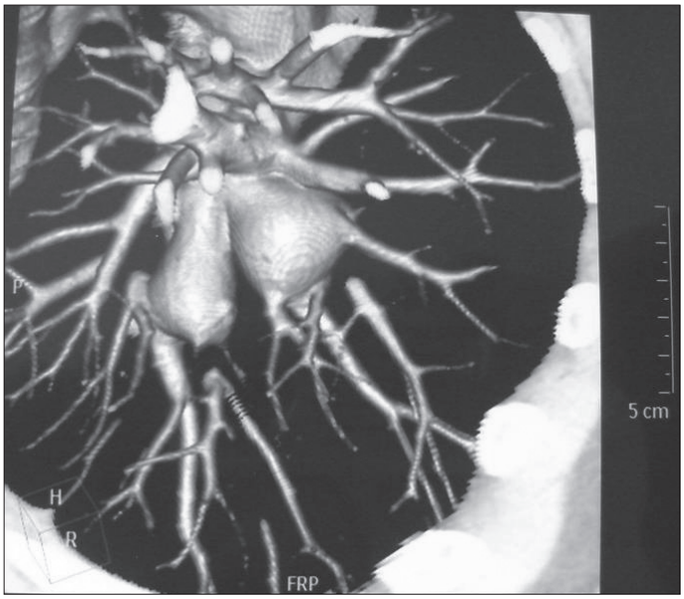

Figure 3. Multislice computed tomography angiography view of 2 separate pulmonary artery aneurysms

sial (1). Its diagnosis is not difficult. However, guidelines for the treatment were not yet established (2). It seems that certain group of patients with asymptomatic idiopathic aneurysm of pulmonary artery without presence of any serious cardiovascular or pulmonary abnormality can profit from conservative approach (2). Investigations prior to VSD repair- carried out 17 years ago- did not reveal these pulmonary artery aneurysms. These recent diagnostic tools discovered these pathologies by coincidence, which made us think that their etiologies are idiopathic. Because corrective surgery has a variable outcome, and prognosis is suggested to be good in the idiopathic form of pulmonary aneurysm, no surgical correction was proposed (4). However, the long-term follow-up is necessary (2).

Cengiz Özbek, Ufuk Yetkin, İsmail Yürekli, Ali Gürbüz
Department of Cardiovascular Surgery, İzmir Atatürk Training and Research Hospital, İzmir, Turkey

References

1. Khalil MZ, Al-Nozha MM, Wani BA. Asymptomatic giant pulmonary artery aneurysm in an elderly male patient. Saudi Med J 2004; 25: 802-4.
2. Holm F, Palecek T, Linhart A, Reznícek V, Aschermann M. Idiopathic aneurysm of the pulmonary artery. Vnitr Lek 2003; 49: 244-7.
3. Shih HH, Kang PL, Lin CY, Lin YH.Main pulmonary artery aneurysm. J Chin Med Assoc 2007; 70: 453-5.
4. van Rens MT, Westermann CJ, Postmus PE, Schramel FM. Untreated idiopathic aneurysm of the pulmonary artery; long-term follow-up. Respir Med 2000; 94: 404-5.

Address for Correspondence/Yazışma Adresi: Ufuk Yetkin, MD
İzmir Atatürk Training and Research Hospital, Cardiovascular Surgery, İzmir, Turkey
Tel: +90 232 244 44 44-2448 Faks: +90 232 243 48 48
E-posta: ufuk_yetkin@yahoo.fr