

Transcatheter Closure of Fistula Between Left Main Coronary Artery to Right Atrium Using Gianturco Coil: Original Image

Sol Ana Koroner Arter ile Sağ Atriyum Arasındaki Fistülün Gianturco Coil Kullanılarak Transkateter Kapatılması

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An 8-year-old girl was admitted for evaluation of harsh continuous murmur at left sternal border. Chest radiography showed mild cardiac enlargement. The electrocardiogram was normal. The transthoracic and transesophageal echocardiography revealed mild enlargement of the right cardiac chambers and tortuous coronary artery fistula draining into the right atrium. Multislice CT scan revealed a fistula from a left main coronary artery to the right atrium. The right coronary system was angiographically normal. The echocardiographic and CT diagnosis was confirmed by the left coronary artery angiography. A 5 French Judkins left angiography catheter was introduced into LMCA and further to aneurysmatic tortuous vessel. Three Gianturco coils were deployed into the fistula to its most distal portion. After procedure, left coronary system angiography showed that there was minimal residual shunting. At the follow-up evaluation 3 months after coil embolisation, the girl was asymptomatic. An echocardiography indicated no residual fistula shunting (Figure 1).

Congenital coronary artery fistula is uncommon form of congenital heart disease. Although most coronary artery anomalies are asymptomatic and found incidentally during angiography. They may result in cardiac failure, myocardial ischemia, thromboembolism, infective endocarditis, rupture of coronary artery. Percutaneous closure with coils has been preferred for treatment in recent years, which becomes an alternative to surgery because of its safety and efficiency.¹⁻³

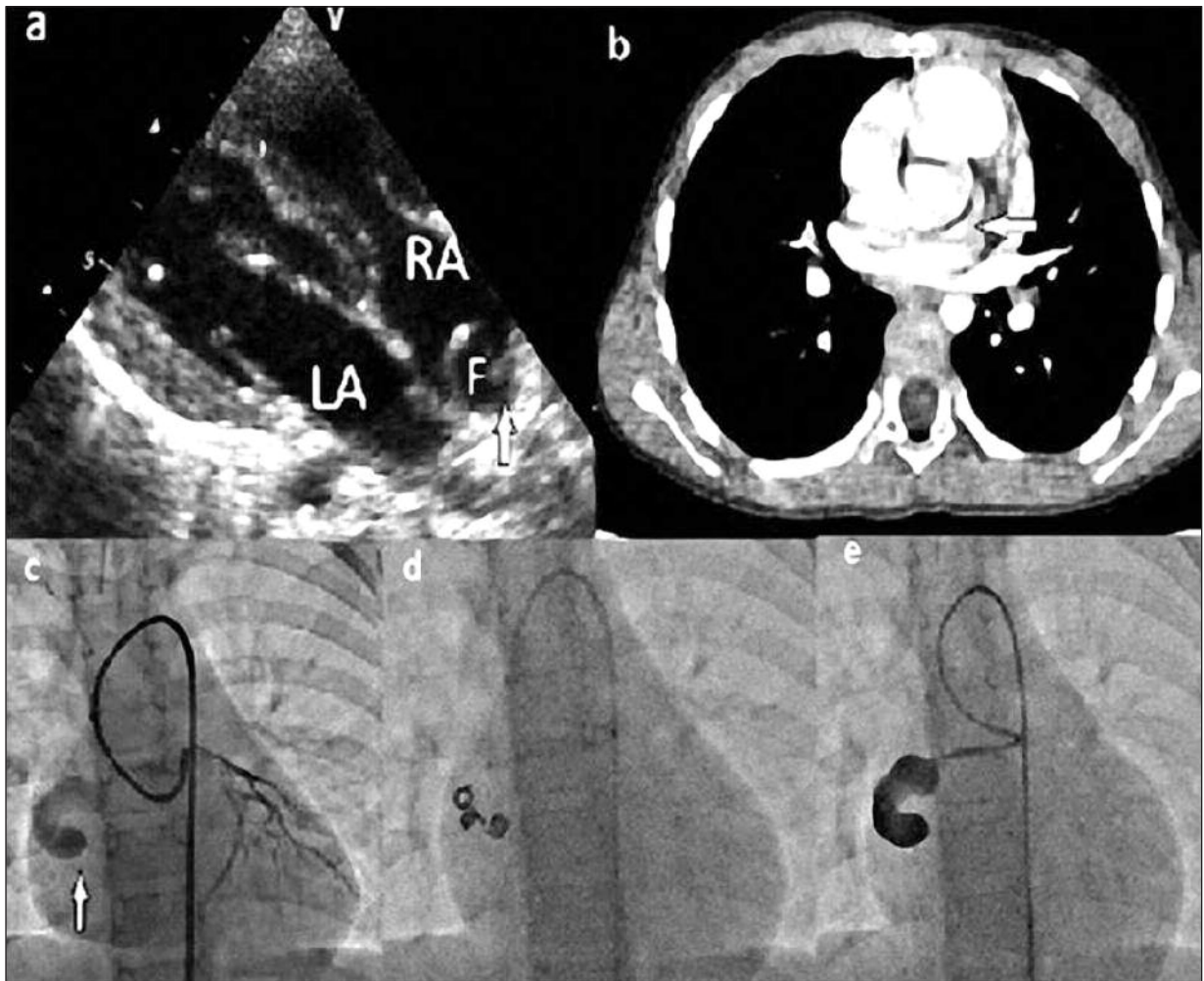
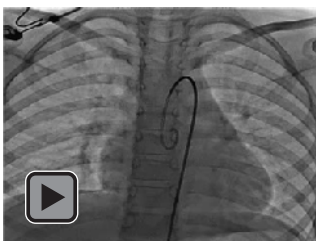


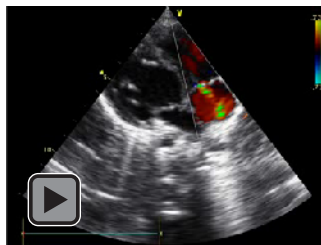
FIGURE 1: (a) Transthoracic echocardiography showing the coronary artery fistula draining into the right atrium. (b) Multislice CT scan showing fistula originating from left main coronary artery and draining to the right atrium. (c, d) Cardiac catheterization demonstrating the fistula from the left main coronary artery to the right atrium and coil embolisation. (e) Minimal residual shunt in the selective left coronary angiography after transcatheter coil occlusion of the left main coronary artery fistula.

REFERENCES

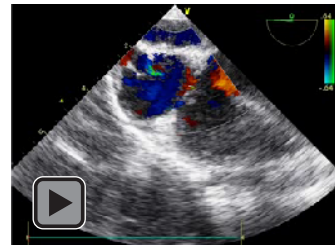
- Mandegar MH, Saidi B, Roshanali F. Right coronary artery fistula to the right atrium. *Pediatr Cardiol* 2011;32(7):1053-4.
- Raju MG, Goyal SK, Punnam SR, Shah DO,
- Smith GF, Abela GS. Coronary artery fistula: a case series with review of the literature. *J Cardiol* 2009;53(3):467-72.
- Kabbani Z, Garcia-Nielsen L, Lozano ML,
- Febles T, Febles-Bethencourt L, Castro A. Coil embolization of coronary artery fistulas. A single-centre experience. *Cardiovasc Revasc Med* 2008;9(1):14-7



Video 1



Video 2



Video 3