

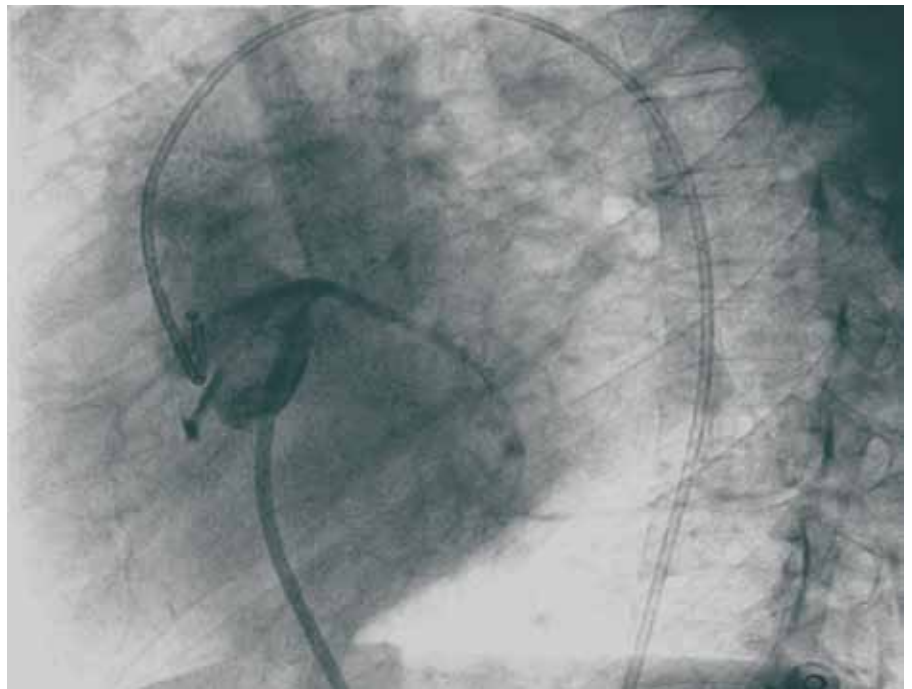
Unconventional route for performing coronary angiography

Koroner anjiyografi için konvansiyonel olmayan bir yol

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We describe herein a 14-year-old patient diagnosed as severe mitral stenosis suitable for balloon mitral valvotomy. A 6 French (Fr) pigtail catheter was introduced retrogradely into the aorta and positioned in the aortic root. An 8 Fr sheath was inserted into the right femoral vein. Under fluoroscopic guidance in the left anterior oblique 40° projection, transseptal puncture was attempted with Brockenbrough needle. As the septum was fleshy and bulging into the right atrium, which was small, it slipped into the right atrium. A second septal puncture was done lower down. A Mullin sheath was gently pushed and left *in situ* while the needle was withdrawn. Surprisingly, the left anterior descending and circumflex arteries were visualized - suggesting coronary angiogram through venous route - and when a larger amount of contrast was injected to document the correct entry into the left atrium, false entry into the aorta was confirmed (Figure). Mullins sheath was withdrawn and the patient remained hemodynamically stable. The patient was discharged after the successful surgery. With a conventional transseptal puncture method, serious or even life-threatening complications may occur as perforation of the aorta, pericardium, pulmonary vein, and right atrial free wall, sometimes requiring surgery. Various imaging modalities such as transesophageal and transthoracic echocardiography, intravascular ultrasound, and intracardiac echocardiography may be employed to determine the optimal transseptal puncture site.



Figure– Left anterior descending and left circumflex arteries visualized through the venous route, indicating aortic perforation.

