

Medical Expertise

"Development of the European Network in Orphan Cardiovascular Diseases"
„Rozszerzenie Europejskiej Sieci Współpracy ds Sierocych Chorób Kardiologicznych”

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CASE SUMMARY

The authors presented a case of a 52-year old female with bicuspid aortic valve, moderate aortic stenosis, severe aortic regurgitation, aneurysm of ascending aorta of 51 mm and patent ductus arteriosus of 25 x 4 mm. The patient also suffers from paroxysmal atrial fibrillation and arterial hypertension. The main problem is the further management of the patient.

DISCUSSION

The appropriate management of the small clinically silent and haemodynamically-insignificant PDA remains controversial. According to European Society of Cardiology guidelines, PDA closure should currently be avoided in these patients. However, some authors support routine PDA closure, even in a silent ductus, to eliminate the lifelong risk of infective endarteritis. However, as noted earlier, this risk is so low that antibiotic prophylaxis is no longer recommended. Thus, the low risk of endarteritis must be balanced with the small risks associated with trans-catheter PDA closure. The overall prevalence of silent PDA is estimated at 0.5% and, with increasing use of echocardiography, the diagnosis of small and silent PDA is likely to rise. As nobody can truly balance the cumulative risk of PDA closure procedural events and the lifetime risk of silent PDA-related infective endarteritis, to close or not to close a silent PDA currently remains a controversial issue in daily practice. (1)

It is now well established that the Amplatzer ductal occluder is safe and efficacious at closing moderate- to large-sized ducts, the procedures having a high rate of success, and a very low risk of residual shunting significant complications such as pulmonary arterial obstruction, embolisation, bleeding, formation of pseudoaneurysms, and loss of femoral pulses have rarely been reported. Percutaneous closure of the duct in the presence of large thoracic aortic aneurysms, however, is known to pose difficulties because of the fragile nature of the tissues, particularly in older patients or in redo situations, but is a well accepted alternative



to surgery. (2)

Surgery should be performed in patients with a BAV, who have a maximal aortic diameter ≥ 55 mm; these face a lower risk of complications than in Marfan. A lower threshold of 50 mm can be considered in patients with additional risk factors, such as family history, systemic hypertension, coarctation of the aorta, or increase in aortic diameter >3 mm/year, and also according to age, body size, comorbidities, and type of surgery. Regardless of aetiology, surgery should be performed in patients who have a maximal aortic diameter ≥ 55 mm. (3)

EXPERT'S OPINION

In conclusion a surgery on aortic valve and ascending aorta can be considered. The closure of PDA alone – when haemodynamically insignificant, seems rather controversial in this patient.

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