neural-tube defects and cardiovascular defects. Cardiac malformations were also found to be associated with carbamazepine as polytherapy (2, 3). One case has been reported with carbamazepine usage as monotherapy during pregnancy where the child was diagnosed with transposition of the great arteries and atrial septal defect following birth (5).

When evaluated with the previously reported case, our case suggests that the concurrence of carbamazepine usage, thought to be reasonably safe as monotherapy during pregnancy, and TGA development is not coincidental. It would be prudent to suggest an association between the various drugs and this malformation, though it is clear that two cases do not make the association casual and more extensive studies are required. However, we feel that keeping the concurrence of cardiac malformations in mind in epileptic pregnant mothers using carbamazepine would be prudent.

Our aim was to draw attention to the rare concurrence of maternal usage of carbamazepine, and cardiac anomaly in the child by presenting a case.

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Correctable causes of left ventricular outflow tract obstruction may not be absolute contraindications for arterial switch operation

Sol ventrikül çıkışı yolu obstrüksiyonu arteriyel “switch” operasyonu için engel midir?

Dear Editor,

Transposition of the great arteries (TGA) is one of the most common congenital heart anomaly. About 20% of TGA cases have a large or small ventricular septal defect (VSD). Only 5% have associated anatomic left ventricular outflow tract obstruction (LVOTO) (1).

We emphasize that the arterial switch operation (ASO) is the best option for all patients with TGA if there is no absolute contraindication. A presence of LVOTO in TGA led surgeons to use a Mustard, Senning, Rastelli or REV procedures. In recent studies fibrosis was diagnosed with cardiac magnetic resonance imaging with Gadolinium in the right ventricle of some patients who underwent Mustard or Senning operation for the treatment of the TGA, fibrosis may be cause of severe ventricular arrhythmias due to ventricular repolarization anomaly (2).

Excellent long term results are obtained in operative survivors following the arterial switch operation (3). Reoperation incidence in patients who underwent successful primary anatomic repair is lesser than other operative procedures which are available for treatment of TGA. The advantages of arterial switch operation also include anatomic correction of ventriculooaerial connection, minimal prosthetic material load, and avoidance of extracardiac conduit (4).

Arterial switch operation must also be the first preference in patients with TGA having LVOTO due to correctable causes (5). In this case, we considered subpulmonary fibromuscular tissue, which causes LVOTO, is correctable with resection. We herein report an application of this approach; ASO in a case of TGA with a malaligned VSD and LVOTO caused by subpulmonary fibromuscular tissue and bicuspid pulmonary valve.

A 1-year-old male, with cyanosis since birth, was admitted to our institute with diagnosis of TGA, VSD and severe pulmonary stenosis. Two-dimensional echocardiography demonstrated a single moderate size non-restrictive VSD with posterior outlet septal malalignment and subpulmonic fibromuscular tissue (Fig. 1, 2) accompanied by severe...
pulmonary stenosis and bicuspid pulmonary valve and usual coronary pattern. The patient underwent operation through a median sternotomy using standard cardiopulmonary bypass with cold blood cardioplegia. Right atriotomy revealed a single malaligned VSD which repaired by a Dacron patch. Subpulmonic excess tissue was resected through a transpulmonary approach. The ASO was performed by standard techniques. No residual gradient between left ventricle and neo-aorta was measured postoperatively (Fig. 3). The intensive care unit stay was uneventful and the patient was discharged from hospital at sixth postoperative day.

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Figure 3. Postoperative sixth-month 2D echocardiogram shows no hemodynamically significant left ventricular outflow tract obstruction (white arrow)
A0: aorta, LA: left atrium, LV: left ventricle

Figure 1. Çikan aort anevrizmasının ve aort yetmezliğiinin kateterizasyon görünümü

Surgical approach to the cases of coarctation in combination with aortic pathologies
Aort koarktasyonuna %11 oranında ventriküler septal deфekt (VSD) ve %7 oranında diğer kardiyak anomaliler eşlik etmektedir. Eğer yaşta görülen aort koarktasyonu eşlik eden aort veya aort kapak patolojisinin bulunduğu durumlarla cerrahi yaklaşım için oturum belli bir görüş birligi yoktur. Aort koarktasyonu eşlik eden patolojilerde; ekstra anatomiik bayпас yöntemi ile tam perdüğümüz 1 olgu ve çift aşamalı tam uyguladığımız 3 olgu da sıraya alınmıştır.

Biküspid aort, 3. derece aort yetmezliği ve çikan aort anevrizması'nın (en geniş yerde 7.5 cm) eşlik ettiği 90 mmHg gradiyenti aort koarktasyonu bulunan 1. hastada (Resim 1) inen aortaya 16 mm spiralli Poli-tetrafluorotilen (PTFE) tüp greft anastomozunu takiben total sirkulatuar arrest altında Bentall prosedürü ile "bileaflet" kapaklı konduit re- plasmanı uygulandı. Hastanın istilması esnasında Dacron greftin sağ lateral tarafına PTFE tüp greftin serbest ucu anastomoz edildi (Resim 2).


Çıkan aort anevrizmasının koarktasyona eşlik eden aort yetmezliği sindir. Aort anevrizmasının eşlik ettiği aort koarktasyonunda; koarktasyon tamirine öncekik verilmesi sol ventrikül önündeki gradiyenti kaldirarak anevrizmatik segmentteki duvar direncini düşürür, anevrizmatik segmentinde disseksiyon ve rüptür riskini azaltır ve ikinci ameliyatı daha güvenli arteryel kanülasyon imkanı tanır (3). Koarktasyon tamir edildenden anevrizma tamirinin yapılması durumunda ise yüksek basınc nedeni ile aortik sürük hatlarda kanama riski artar. Koarktasyona eşlik eden geniş

Koarktasyona eşlik eden aort patolojilerinde cerrahi yaklaşım
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