

## Giant pulmonary artery aneurysm due to undiagnosed atrial septal defect associated with pulmonary hypertension

*Atrial septal defektin sebep olduğu pulmoner hipertansiyon sonucu gelişen dev pulmoner arter anevrizması*

Dear Editor,

We read with great interest a recent article by Tartan et al. (1) "Giant pulmonary artery aneurysm due to undiagnosed atrial septal defect associated with pulmonary hypertension".

In this article the authors report on a rare clinical entity: a giant pulmonary artery aneurysm (PAA) due to an even more rare condition - a late diagnosed atrial septal defect (ASD) resulted in Eisenmenger's syndrome. Although read very carefully, we could not come across to an explanation about the rupture risk for aneurysm and follow-up frequency in the article.

When Eisenmenger's syndrome is present, we understand that the ASD should not be corrected; however, we believe that the rupture risk of aneurysm shall not be ignored.

The optimal treatment strategies are not clear when a pulmonary artery aneurysm is diagnosed. Some authors prefer conservative management, while others advocate surgery. The localization and size of the aneurysm predisposing cardiac pathologies and risk of rupture are important for the choice of treatment (2, 3). Symptomatic cases with significant pulmonary regurgitation or stenosis (which is enough to cause right ventricular dysfunction), pulmonary hypertension, or associated with other cardiac lesions, are candidates for surgery. Possible complications such as dissection, embolism, rupture, compression of the surrounding tissues may occur as the most life-threatening complications. The risk of dissection is associated with pulmonary hypertension and/or connective tissue diseases while the risk of rupture increases with advanced age (4).

When a giant PAA is present, we believe that the treatment should include surgical correction. Our experience showed that elective surgical repair is required if signs of compression to adjacent vital structures, thrombus formation in the aneurismal sack, or  $\geq 0.5$  cm increase in the diameter of the aneurysm in 6 months are observed during the follow-up period. Sometimes only aneurismal surgery may be applicable; e.g. aneurysmorrhaphy, reconstruction with pericardial patch, arterioplasty, homograft or synthetic graft interposition (5).

The case presented in the article is a 55-year-old male, who is exposed to possible dissection and/or rupture, and even sudden death. The ASD is inoperable due to Eisenmenger's syndrome, but due to giant PAA surgical management should be recommended. We would like to address the authors these two questions:

- 1) What is the follow-up frequency?
- 2) Are you planning to recommend surgical treatment for PAA, and if yes, when?

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### Author's reply

Dear Editor,

We would like to thank the authors of the letter for their interest in our article.

1- The patient is not regularly followed -up in our clinic. He is being taken care by another cardiology clinic according to his preference.

2- Surgical treatment was not offered due to increased perioperative mortality and morbidity. The surgery was also not offered by the clinic where he is being followed-up currently.

He is still alive but is having serious dyspnea that requires frequent hospitalizations.

Yours Sincerely

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## Ross operation for teenagers: correct indication determines the long-term outcome/ Early double valve re-replacement after Ross operation

*Gençlerde Ross ameliyatı: Doğru endikasyon uzun dönem sonuçları belirler/ Ross ameliyatı sonrası erken dönemde çift kapak re-replasmanı*

I read with great interest the case report by Özkara et al. (1) in the June issue of the journal and must commend the authors for highlighting the important issue of appropriate case selection for Ross operation and its impact on long-term outcome.

The surgical management of aortic valve disease in children and young adults continues to be a challenging problem. Choice of valve remains a controversial area with both mechanical as well as bioprosthetic valves having their pros and cons in this subgroup of patients. The Ross operation, involving replacement of native aortic valve with a pulmonary autograft, with its advantages of growth potential, optimal hemodynamic performance, and freedom from anticoagulation and hemolysis has become an attractive option for pediatric and adolescent patients requiring aortic valve replacement (2). However, it is extremely important that this technically demanding

operation with inherent difficulties and the crucial need for attention to detail must be performed in appropriately selected patients otherwise it is bound to fail as reported by Özkara et al. (1).

The authors performed Ross operation in a teenager with acute rheumatic fever, a controversial and in my opinion perhaps an outright incorrect indication for this procedure as suggested by available scientific evidence (3, 4). It is a well-established fact that the autograft is sensitive for recurrent rheumatic activity (3) and in patients with concomitant involvement of mitral valve by rheumatic fever the autograft failure rate is quite high (3). Although the case report does not mention anything regarding involvement of mitral valve in this patient however, I am sure that mitral valve could not have been spared by rheumatic fever as is the case in most patients. Hence, using the benefit of hindsight, the authors can conclude beyond doubt that the autograft valve in the rheumatic fever population after the Ross procedure demonstrates a poor long-term outcome and therefore use of the autograft is contraindicated in patients with active, recurrent, or aggressive rheumatic fever.

Acceptance of the Ross operation, particularly in young patients, is escalating. We are now four decades from the inception of the Ross operation and despite accumulating evidence suggesting benefits of this operation in the young patients, it is extremely important to curb our enthusiasm to perform this operation non-selectively and always remember that it is not only choice of the operation itself but choosing the right patient that determines the long-term outcome of the operation and guarantees maximum benefit to patient and minimal disappointment to the surgeon.

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## Author's reply

Dear Editor,

I read the letter with great interest. I have to highlight that the first operation (Ross procedure) of the patient was performed by another surgical team. In our clinic, we performed the second operation. In our report, we conclude that the Ross operation is still an important choice for aortic disease in young patients. However, careful attention should be made to decide the indication of Ross procedure.

With best regards,

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## Karotis arter stentleme: Bir cerrah görüşü? / Karotis arter stentlerinin erken ve geç sonuçları

### *Carotid artery stenting: from a glance of a surgeon / Early and late outcomes of carotid artery stenting*

Sayın Editör,

Derginizin Haziran 2007 sayısında yayınlanan, Dr. Aydın ve arkadaşları (1) tarafından yapılan karotis arter stentlemenin (KAS) erken ve geç sonuçlarını kapsayan çalışmayı büyük bir ilgiyle okudum. Yazarları mükemmel sonuçlarından dolayı tebrik ederim. Bir cerrah olarak bu konu üzerinde birkaç yorum yapmak isterim.

Günümüzde koroner arter stentleme mi yoksa koroner arter baypas cerrahisi mi halen tartışmalı bir konudur. Aynı tartışma karotis arter stentleme için de geçerlidir. Bu yüzden, bizim üzerinde durduğumuz soru şudur: KAS sonuçlarının karotis endarterektomiye (KEA) eşit veya daha iyi olduğu yönünde herhangi bir bulguya sahip miyiz? Açıkçası, bu cevaplandırılması gerekli olan en önemli sorudur.

Yayınlanmış birçok prospektif randomize çalışma sonuçlarına dayanılarak, ciddi ekstrakraniyal karotis arter lezyonları olan, hem semptomatik hem de asemptomatik hastalarda inme ve ölümün önlenmesinde, KEA tedavide "altın standart" olarak kabul edilmiştir (2-4).

Son yıllarda, KAS özellikle bazı yüksek riskli hastalardaki karotis arter stenozlarına yeni girişimsel ve daha az invazif bir tedavi yaklaşımı olarak ortaya çıkmıştır. Tecrübeli ellerde direkt işlemle ilgili riskler düşük olsa bile, kontrol grubu ile karşılaştırmalı olarak KAS sonrası uzun dönem sonuçları hakkında çok fazla bilgimiz yoktur. Stenotik karotis arter hastalıklarında KAS'nin etkinliği ve güvenilirliği tartışmalı konu olarak kalmaktadır (2-4).

Başlangıçta, KEA ile yüksek başarı oranları elde eden birçok cerrah tarafından KAS şiddetle reddedilmiştir. Gerçekte, KAS ile erken randomize çalışmalar yüksek inme oranları göstermelerine rağmen, mekanik serebral emboli koruyucularındaki gelişmeler ve stent dizaynları ile stentleme tekniklerindeki iyileşmeler KEA ile karşılaştırılabilir bir komplikasyon oranlarıyla KAS yapılabilmektedir (3).

Damar cerrahlarının karotis arter stenozlu hastaların bakımında en iyi donanımlı oldukları gözükmemektedir. Cerrahlar anatomiye, operasyon endikasyonlarına ve uzun dönem takiplerde hastalara daha hakimdir. Damar cerrahları ya KAS'de etkin olmayı seçebilirler ve KAS'yi potansiyel tedavi seçeneği olarak teklif edebilirler ya da bu yeni tedavi yöntemine inanmayabilirler. O zaman da, damar cerrahları karotis arter hastalıklarının teşhis ve tedavi sorumluluklarını, serebrovasküler lezyonlu hastaların bakımına alışkın olmayan diğer uzmanlık gruplarına terketme riskiyle karşı karşıya olacaklardır (3, 5).

Karotis arter stentleme karotis arter hastalığını tedavi etmek için birçok uzmanlık alanına bir kapı açmıştır. Kardiyologlar ve radyologlar, kateterizasyon tecrübeleri ve anjiyografi salonlarına devamlı girişlerinden dolayı günlük klinik pratik uygulamalarına KAS'yi dahil etmeye istekli davranmaktadırlar. Cerrahlar (özellikle damar cerrahları) kendi pratiklerinde bu hastaları tedavi etmeye devam etme niyetindedir ise bu iş için gerekli olan kateter uygulama tecrübelerini eğitim programları, mini-gruplar veya tecrübeli endovasküler uzmanlarla ortaklıklar kurma vasıtasıyla elde etmeleri çok önemlidir. Karotis arter stentleme yapan damar cerrahlarının ve diğer uzmanlık gruplarının eğitimleri ve yeterliliklerinin belgelenmesi için gelecekteki program her bir uzmanlık alanlarının dernekleri tarafından şekillenecektir (2, 3, 5).

Karotis endarterektomi maliyet açısından KAS ile karşılaştırıldığında daha ucuzdur. Bu kısmen KAS ile daha yüksek inme oranı kısmen de stent ve beyin koruyucu cihazların yüksek maliyetli olması ile ilişkilidir (4).

Karotis arter stentleme sonuçta öncelikli alternatif tedavi şekli olabilese bile KEA, ister yüksek isterse düşük risk grubunda olsun, ciddi ka-