A proposal for terminology of aortic arch surgery

Arkus aort cerrahisine yönelik bir terminoloji teklifi

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The aortic arch replacement with branches should have to be performed in thoracic aortic aneurysm or dissection surgeries in selected cases. Total arch replacement or arch replacement with branches refers to define this intervention. However, this definition is considered to be insufficient to explain which branches of the aorta are replaced.

Between May 2008 and May 2013, 310 patients underwent ascending aorta replacement and aortic arch replacement. Ascending aorta replacement was done in 235, while it included brachiocephalic artery re-implantation in 48, brachiocephalic artery and left carotid artery replacement in 16, and total arch replacement in 11. Many of these operations were simultaneous with several cardiac interventions. However, we present our aortic arch surgery terminology herein.

Three major arteries usually originate from the aortic arch: the brachiocephalic artery, the left common carotid artery, and the left subclavian artery.

We gave numbers to these branches to clarify the definition of surgical intervention:

- For the brachiocephalic artery '1'
- For the left carotid artery '2' and
- For the left subclavian artery '3'.

Furthermore, we divided and named the aortic arch replacement into three categories according to the pattern of involvement of the aortic arch branches as follows:

1/3 arch replacement: Replacement of the aortic arch with reimplantation of the brachiocephalic artery.

2/3 arch replacement: Replacement of the aortic arch with reimplantation of the brachiocephalic artery and the left carotid artery.

Total arch replacement: Replacement of the aortic arch with reimplantation of three arch arteries.

We consider that categorization of surgery of the aortic arch as above may be helpful to define the surgical intervention practically.

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