Conference discussion

**Dr. M. Turina** (Zurich, Switzerland): Nowadays, we usually start moving from the definition of hospital mortality to 30-day mortality and 3-month mortality. This will be in the new guidelines about the reporting of mortality. How is your 1-month and 3-month mortality?

**Dr. Minatoya**: Actually, this is 30 days mortality.

**Dr. Turina**: The fact is that many patients get removed from hospital to another facility.

**Dr. Minatoya**: Right. But in our system, the patients do not move out until well, the patient passed away. Few patients who had a big stroke moved out to a sort of caring house. They are usually staying in our hospital for a long time.

**Dr. P. Urbanski** (Bad Neustadt, Germany): The double cannulation is really a very good idea. We use it occasionally but with one difference.

In patients with cerebral malperfusion, you have often patients with narrowed arterial lumen in both carotid arteries. And the second line in the axillary artery is localized also central to the carotid arteries. To ensure a sufficient cerebral perfusion during cardiopulmonary bypass, we place a second line in the carotid artery directly under bifurcation because the best method of cerebral protection during circulatory arrest is useless if the cerebral perfusion is not sufficient during cardiopulmonary bypass.

**Dr. Minatoya**: I completely agree with you. The axillary artery is rarely dissected, so we can put the cannula inside the true lumen basically. After establishment of the circulatory arrest, we can see the orifice of arch vessels and usually we can find a good backflow, then we do not worry about it so much. But, of course, we put the two canulas inside the rest of the arch vessels.

**Dr. S. Kucuker** (Ankara, Turkey): There are many groups which report that single cannulation is satisfactory, especially for cooling. For the rewarming period, extra flow may be necessary. In that case, you can directly cannulate the graft for antegrade flow, and you will avoid to use retrograde flow at any time.

**Dr. Minatoya**: We usually use one branched graft for hemiarch replacement, and four branched graft for total arch replacement. In short, we have one branch for aortic return to rewarm the patient besides the axillary arterial cannulation.

eComment: Rapid and safe establishment of cardiopulmonary bypass in repair of acute aortic dissection: improved results with double cannulation

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The surgical treatment of acute type A aortic dissection till now remains a difficult problem. High risks of development of malperfusion syndrome or neurologic complications both, up to and during operation result in increase hospital mortality.

Although the femoral artery has been widely chosen for cardiopulmonary bypass as an alternative arterial inflow to the diseased ascending aorta, complications due to retrograde perfusion, such as retrograde atheroembolism or organ malperfusion, have also been reported [1, 2]. The method of double cannulation, offered by the authors, allows quick establishment of cardiopulmonary bypass, and also avoids atheroembolism and organ malperfusion.

We want to congratulate the authors on their excellent results submitted in given abstract [3]. Efficiency of this technique specifies low hospital mortality rate (2.3%) and low frequency of perioperative stroke (5.7%).

The experience of our centre exceeds 130 cases of acute aortic dissection. We have begun to use right axillary artery cannulation since 2004. Since that time, the frequency of perioperative complications has decreased to 6.6%. Thus, we support the opinion of the authors on the necessity of axillary artery perfusion for the correction of acute type A aortic dissection.

**References**

