

Aneurysm of ascending aorta incision after double valve replacement

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Abstract

Background: Ascending aortic aneurysm is a common clinical disease, whereas the aneurysm at the incision of ascending aorta after valve replacement has not been reported. **Aims:** We report a case of giant ascending aortic incision aneurysm requiring surgical correction after double valve replacement. **Materials & Methods:** A 45-year-old male was referred to our department with dyspneic respiration after exercises for 1+ months, having previously undergone a mitral and aortic valve bivalve replacement 15+ years ago. The parasternal long-axis section of transthoracic echocardiography provided that the diameter of ascending aorta was thickened(59mm). Computed tomography angiography (CTA) of the aorta showed a localized anterior protrusion aneurysmal of the ascending aorta with a diameter of approximately 69 mm, and the tube wall was severely calcified. **Results:** Under cardiopulmonary bypass, the large aneurysm was incised and the artificial blood vessels were replaced. The patient achieved an uneventful postoperative recovery with no significant complications. **Discussion:** Ascending aortic incision aneurysm has the same treatment regimen as ascending aortic aneurysm although it's extremely rare. **Conclusion:** Open surgery was indispensable in this case owing to the large aneurysm and the condition liable to rupture.

Aneurysm of ascending aorta incision after double valve replacement

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Keywords

ascending aortic incision, ascending aortic aneurysm, valve replacement

Ascending aortic aneurysm is a common clinical disease¹, whereas the aneurysm at the incision of ascending aorta after valve replacement has not been reported.

A 45-year-old male was referred to our department with dyspneic respiration after exercises for 1+ months, having previously undergone a mitral and aortic valve bivalve replacement 15+ years ago. The parasternal long-axis section of transthoracic echocardiography provided that the diameter of ascending aorta was thickened(59mm,Figure1A). Computed tomography angiography (CTA) of the aorta showed a localized anterior protrusion aneurysmal of the ascending aorta with a diameter of approximately 69 mm (Figure1B and 1C), and the tube wall was severely calcified (Figure1D).

Under cardiopulmonary bypass, the large aneurysm was incised and the artificial blood vessels were replaced (Figure1E and 1F). The patient achieved an uneventful postoperative recovery with no significant complications.

Conflict of interests

The authors declare that there are no conflict of interests.

Ethics approval and consent to participate

All data collected in our study were obtained all necessary administrative permissions to access and subsequently use. The patient has signed consent form, agreed to participate in this study, and allowed the researcher to publish photos of all cases without any restrictions on use.

References

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Figure legends

Figure 1 :(A)Transthoracic echocardiography: Parasternal long-axis view showing the diameter of ascending aorta was thickened(59mm); (B)CTA of the aorta revealed a localized anterior protrusion aneurysmal of the ascending aorta ; (C)The diameter of the aneurysmal was roughly 69 mm; (D)the tube wall was seriously calcified;(E)showing the aneurysm at the incision of ascending aorta;(F) Replacement by the artificial blood vessels .

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