

Redo Hemi-Cabrol Aortic Root Replacement with Hemi aortic arch repair

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Background:

The Cabrol aortic root replacement with subsequent modifications remains an extremely useful technique for the aortic surgeon. The technical considerations detailed here allow for the uncompromised creation of a hemi-Cabrol anastomosis in complex aortic reconstructions.

Aim and objectives:

To evaluate the early outcomes of the modified Cabrol technique as a method of coronary reimplantation during complex composite graft replacement of the ascending aorta

Methods:

A 43-year-old male patient had previously undergone a mono leaflet (single tilted disc) aortic valve replacement 30 years earlier. He was referred with increasing shortness of breath on exertion and 8 cm dilatation of the ascending aorta showing a dissection flap extending to proximal 1/3 of the aortic arch on computed tomography. During dissection of the aortic root, the left coronary button tissue was posteriorly fixed, and therefore a hemi-Cabrol anastomosis with an 8 mm prosthetic tube graft which was routed to the right side of the tube graft and anastomosed to its anterolateral surface.

Result:

I report a successful case of hemi-CARR for complicated aortic valve replacement. The patient had an uneventful procedure and in-hospital recovery. On follow-up, he remains well, and postoperative imaging confirms conduit patency. Positioning of the left hemi-Cabrol graft may prove challenging in the face of complex aortic reconstructions because of the increasing likelihood of kinking and compression. Routing the graft depends on the anatomy avoiding compression of the graft.

Conclusion:

Cabrol aortic root replacement remains an invaluable technique especially in redo cases if coronary artery mobilization proves challenging or inflammatory processes affecting the aortic root and coronary Ostia.

Keywords:

Aortic root, Cabrol procedure, complex aortic surgery, Bentall procedure, imaging in aortic disease, treatment outcome, Stanford type A.