Type-B interruption of the aortic arch with a giant aortic arch aneurysm in an adult

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A 21-year old male patient was evaluated for weakness and claudication of both lower limbs. Radio-femoral delay was present on palpation. No intracardiac anomalies showed up on echocardiography. Figures 1 and 2 show preoperative and postoperative computer tomography images and illustrations of the interrupted aortic arch. The aneurysm was excised and continuity established with an interposition graft.

Figure 1: (A) Preoperative computer tomography anterior view, showing the type-B aortic interruption with the aneurysm arising from the distal segment of the interruption at the level of the left subclavian artery. Innominate vein causing an artefact effect because of its superimposition on the aneurysm. (B) Preoperative computer tomography posterior view, showing the type-B aortic interruption with the aneurysm arising from the distal segment of the interruption at the level of the left subclavian artery. Left subclavian artery origin is dilated and arises from the aneurysm. (C) Diagrammatic representation of the type-B aortic interruption with aneurysm before surgery. A: aneurysm; AA: ascending aorta; DD: descending aorta; RIA: right innominate artery; LCC: left common carotid; LSA: left subclavian artery; X: cross-clamp application site; IV: innominate vein.

Figure 2: (A) Postoperative computer tomography aortogram showing the anterior view of the interpositioned graft. (B) Postoperative computer tomography aortogram showing the posterior view of the interpositioned graft. (C) Diagrammatic representation of the type-B aortic interruption with aneurysm after surgery. AA: ascending aorta; DD: descending aorta; RIA: right innominate artery; LCC: left common carotid; LSA: left subclavian artery; G: interpositioned graft.