

Surgical options

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Type A (or type I and II) dissections Those involving the ascending aorta usually require surgical intervention. The chest is opened through a median sternotomy and CPB is commenced, often with core cooling down to 18°C based on the technique used. The aorta is cross-clamped as high up the ascending aorta as possible and opened. Cardioplegic solution is infused into the coronary ostia to arrest the heart in diastole. If the intimal tear is present and localised, the ascending aorta is excised with the tear and replaced with a synthetic graft. The distal anastomosis is performed with circulatory arrest. Recently there have been attempts to carry out endovascular stenting of type A dissections with variable success.

Adolf Kussmaul, 1822–1902, Professor of Medicine at, successively, Heidelberg, Erlangen, Freiburg and Strasbourg, Germany. The setting of acute type I dissection is debatable and is based on the clinical picture and surgical experience. Type B (or type III) dissections Initially, these are best managed medically with antihypertensive drugs and monitoring on an acute care unit. Intervention is indicated in complicated cases if the pain increases (signalling impending rupture) or fails to resolve; or when the dissection is associated with evidence of malperfusion (organ, limb or cutaneously placed neurological symptoms). The use of percutaneous endovascular stents is currently the standard intervention of choice in patients with complicated type B dissection, and surgery is reserved for the rare case that is not suitable for stenting.

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