When Should Acute Type B Dissections be Treated with Endografts, and Which Graft Is Best: How Will We Know?"

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E ndovascular stent graft placement has recently attracted attention for the treatment of type B aortic dissection. Whereas the feasibility and safety of third-generation commercial stent graft devices have been shown, the specific settings in which stent graft treatment of type B dissection is likely to be prognostically favorable have not yet been defined. However, the International Registry of Aortic Dissection (IRAD) provided clear evidence that complicated type B dissection with evidence of malperfusion syndrome, periaortic collection of blood (imminent rupture), or recurrent pain is associated with poor outcome, justifying stent graft placement for prognostic reasons.

This assumption was eventually corroborated by findings in IRAD and our own database with improved survival at 1 and 3 years' follow-up (p < .001) versus surgery or medical therapy. The outcome of patients with initially uncomplicated type B dissection was the subject of the randomized, multicenter INSTEAD (Investigation of Stent grafts in type B Aortic Dissection) trial, which concluded in 2005; preliminary results on all-cause mortality and secondary outcome variables including conversion to stent and/or surgery, induced thrombosis of the false lumen, cardiovascular morbidity, aortic expansion (> 5 mm/yr of maximum diameter including true and false lumen), quality of life, length of intensive care unit stay and hospitalization will be available at the 2005 VEITH meeting. At present, complicated type B dissection with evidence of malperfusion, imminent rupture, or progression may benefit from stent graft placement and subsequent aortic remodeling; until the outcome analysis on stable type B dissection is completed, careful patient selection is mandatory for endovascular treatment of type B dissection.

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