



Patient Selection for Endovascular Abdominal Aortic Aneurysm Repair

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ABSTRACT Indications for endovascular aneurysm repair cannot be considered absolute. Patient selection depends on the availability of product, the skills and experience of the implant team, and the anatomy and overall condition of the patient. It is unclear if these procedures should be offered to all those with large aneurysms, restricted to high-risk or low-risk patients, or offered to patients with smaller aneurysms not currently considered for operation. More patients will be suitable as more devices become available, skills improve, sheath sizes decrease, and long-term data showing efficacy become available. Significant anatomic factors affecting patient selection include the length, shape, and angulation of the infrarenal neck, any involvement of the common iliac arteries with either aneurysmal or occlusive disease, occlusive disease or marked tortuosity of the iliofemoral access vessels, or intrinsically small iliac arteries.

Early results indicate that the procedure is at least as safe as conventional repair, and patients can return to normal activities sooner. What we do not know is whether the natural history of aneurysms (i.e., death from rupture) is altered by an endovascular device. We are just learning the failure modes, and some were not anticipated in the design phase. We do not know if progressive dilatation of the attachment sites and aneurysm remodeling will result in device migration but the US IDE experience and reports from Europe suggest that these phenomena will occur. Our early experience suggests that we should avoid endografting in young, otherwise healthy patients with long life expectancies.

Keywords Patient selection, endovascular repair

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