Letters

Management of RAAs

In response to two articles published in the January 2011 issue of *Endovascular Today* on renal artery aneurysm (RAA) management by Drs. Kalva, Wu, and Irani (58–62) and Drs. Murphy, Arko, and Mr. Arko (64–68), we believe that there is a clear discrepancy in terms of suggested indications for the treatment of RAAs.

Drs. Kalva and Murphy recommend revascularization of RAAs when the size reaches 2 cm and 1.5 cm, respectively. However, review of the literature, including *Rutherford's Vascular Surgery,* contradicts both. The textbook-recommended size for revascularization in asymptomatic RAAs is 3 cm,[1] excluding pregnant women and those of childbearing age (2.5 cm for this subset). We believe 3 cm is reasonable, because most aneurysms detected are incidental, and natural history studies have shown a very low rate of rupture.

In one study of 62 asymptomatic patients, RAA sizes 1.5 to 4 cm were followed for a median of 8 years with no ruptures, no need for operations, and no symptoms developed. Twelve percent of patients died during follow-up due to causes that were unrelated to aneurysm.[2] In a second series, 34 patients with RAA were followed conservatively with renal angiography and showed no ruptures and no changes in up to 84% of patients over a period of close to 3 years.[3]

However, we do agree that there is no clear consensus on the exact size for revascularization in asymptomatic RAA.

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Response

Clear indications for repair of RAAs include rupture and symptomatic disease. Symptoms may include refractory renovascular hypertension, renal ischemia secondary to embolism, flank pain, and hematuria.[1] In asymptomatic patients, repair may be indicated for prevention of rupture. The highest risk of rupture has been shown in patients with false aneurysms and in pregnant women. Therefore, repair for asymptomatic disease is indicated in these patients at any size. Further, while it is generally agreed upon that increased aneurysm size is directly associated with increased rupture risk, there is no current consensus regarding the size criteria for repair of RAAs. Experts have recommended repair for aneurysms ranging from 1.5 to 4 cm, with most suggesting repair at 2 cm.[2-6]

Proponents of conservative management rely on the well-documented low risk of rupture associated with RAAs. The reported 6% incidence of graft failure and unplanned nephrectomy, as well as a mortality risk of up to 4% associated with standard open repair, also convinces some to approach asymptomatic patients more conservatively.[7] Nonetheless, the near 80% mortality rate associated with rupture, should it occur, remains a strong argument for advocates of early repair. The availability and success of endovascular interventions additionally lowers initial concerns regarding the risk of intervention.[8]

Overall, the decision for repair in most asymptomatic patients is best made on a case-by-case basis after a thorough assessment of the patient's anatomy and surgical risk by the physician and a frank discussion with the patient regarding the risks and benefits of repair. ■

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