Unruptured Intracranial Aneurysm Outcome

see Unruptured intracranial aneurysm treatment score

There is notable interhospital heterogeneity in outcomes among even the largest volume unruptured intracranial aneurysm referral centers. Although further regionalization may be needed, mandatory participation in prospective, adjudicated registries will be necessary to reliably identify factors associated with superior outcomes [1].

Both UIA treatment modalities decided by one hybrid neurosurgeon showed low complication rates and good clinical outcomes. These results may serve as a point of reference for clinical decision-making for patients with UIA [2].

In a cohort of Medicare patients, there was no difference in mortality and the readmission rate between clipping and coiling of unruptured cerebral aneurysms. Clipping was associated with a higher rate of discharge to a rehabilitation facility and a longer length of stay [3].

Cost-effectiveness

Patients' life expectancy, risk of rupture, and utility of awareness of an untreated aneurysm mainly define cost-effectiveness. However, important uncertainties remain on the rupture risk according to size and location of the aneurysm and on the utility of awareness of untreated aneurysm. More data on these factors are needed to define and individualize cost-effectiveness analyses [4].

The PHASES score is an easily applicable aid for prediction of the risk of rupture of incidental intracranial aneurysms [5].

The results of a study demonstrate the importance of taking the preinterventional psychiatric history into considerations when evaluating the outcome after unruptured aneurysm treatment. The unfavorable outcome of the aneurysm group seems to be caused by factors that are not related the aneurysm diagnosis or treatment itself [6].

Age

Surgery for incidental aneurysms of the anterior circulation can be accomplished without mortality and with an operative morbidity of 6.5%. Higher morbidity occurs in surgery for aneurysms in more difficult locations as well as larger aneurysms. The increased risk of bleeding from larger aneurysms, however, may justify the increased morbidity of surgery for these lesions. Surgery for incidental

aneurysms can be recommended in healthy individuals whose anesthetic risk is acceptable and for aneurysms less than 1.5 cm in diameter arising from the middle cerebral and posterior communicating arteries. Advancing age alone is not a contraindication for surgery, nor is size greater than 1.5 cm in diameter; however, the latter factor increases the operative risk. Operations to clip aneurysms of the carotid bifurcation, carotid-ophthalmic, and anterior communicating arteries may also be recommended, but these aneurysms are more difficult to approach and surgery carries a higher morbidity. Larger aneurysms, greater than 1.5 cm in diameter, in patients over 60 years of age, and in less accessible locations may not benefit from operation because surgical morbidity for these lesions is high and with advancing age the lifetime risk of rupture has decreased. For incidental aneurysms of the posterior circulation there are insufficient data to make a recommendation regarding surgery, although it is anticipated that the counsel for anterior circulation aneurysms will apply. If operative mortality and morbidity are to be maintained at acceptable levels, incidental aneurysm surgery should be the province of the accomplished aneurysm surgeon who has available to him the most modern techniques and equipment. With the clipping of incidental aneurysms, hopefully the number of patients suffering from subarachnoid hemorrhage with its high morbidity and mortality rates can be further reduced [7)].

1)

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4)

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5)

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7)

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