Top Things To Know
About Patients with Unruptured Intracranial Aneurysms

1. Data on the true incidence rates of UIAs is scant; methods for collecting this information would require prospective and long-term studies of populations at risk with several assessments over time.

2. Risk for intracranial aneurysms can be categorized in three phases: risk for aneurysm development, risk for growth or morphologic change, and risk for rupture.

3. Non-modifiable risk factors for aneurysm development include older age, female sex, family history of aneurysms or subarachnoid hemorrhage, and other at-risk disorders (below).

4. Several clinical groups are at higher risk of aneurysm formation, including patients with polycystic kidney disease, type IV Ehlers-Danlos syndrome, Marfan’s syndrome, coarctation of the aorta, bicuspid aortic valve, pseudoxanthoma elasticum, hereditary hemorrhagic telangiectasia, neurofibromatosis type 1, Alpha1-antitrypsin deficiency, fibromuscular dysplasia, pheochromocytoma, Klinefelter’s syndrome, tuberous sclerosis, Noonan’s syndrome, alpha-glucosidase deficiency, microcephalic osteodysplastic primordial dwarfism, or intracranial arteriovenous malformations.

5. Women have a higher frequency of intracranial aneurysms compared to men across the age spectrum. Modifiable risk factors such as smoking and hypertension have been associated with UIA cohorts.

6. Patients with two or more family members with intracranial aneurysms or SAH should be offered aneurysmal screening either by CT or MR angiography. Risk factors also considered in screening are smoking, hypertension, and female gender.

7. For patients with an aneurysmal subarachnoid hemorrhage, further evaluation of coexistent unruptured aneurysms should be undertaken.

8. For patients presenting with a cranial nerve palsy, early treatment is recommended.

9. Both CT and MR angiography are most sensitive for the detection and follow-up of UIAs. Aneurysms with follow-up documentation of enlargement should be offered treatment in the setting of no co-morbidities.

10. Several treatment modalities might be considered, including surgical clipping or endovascular treatment. Radiation exposure should be discussed with the patient if endovascular procedures are explored.

11. Treatment of UIAs should be commenced at high volume centers that have volume experience in the treatment of aneurysms.