Subarachnoid hemorrhage (SAH) is a type of stroke that accounts for about 7-10% of all strokes. SAH can occur spontaneously or as a result of trauma. The spontaneous, primary bleedings are usually caused by the rupture of saccular aneurysm of the artery on the basis of the brain (aSAH ~ 85%). The 5% consists of a variety of rare conditions (cerebral arteriovenous malformations, hypertension, arterial dissection etc). The diagnosis of SAH is usually established by computer tomography (CT). CT scan is the first investigation that should be performed when SAH is suspected, and should be performed as soon as possible after the onset of headache. If SAH is suspected and the CT scan is normal, a lumbar puncture should be performed. To identify the cause of SAH, CT angiography (CTA) is usually performed. Its sensitivity for detecting aneurysms with a diameter of more than 3 mm has been shown to be 96%, and less for smaller aneurysms. CTA can provide prompt and accurate diagnostic and anatomic information in the setting of SAH with an excellent detection rate in acute ruptured aneurysms. These findings suggest the increased role for CTA in the evaluation of cerebral aneurysms. In case of a negative CTA and presence of clinical findings, digital subtraction angiography should be performed, as it is considered the gold standard for imaging intracranial aneurysms.


