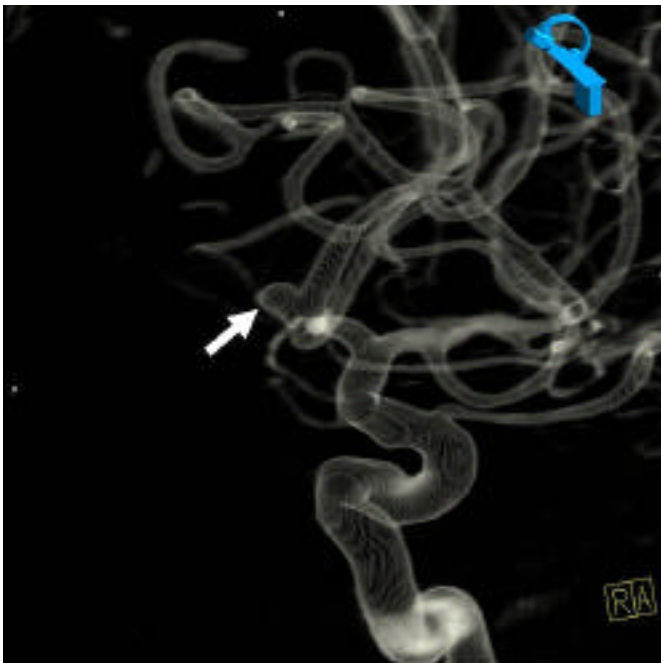


3D ANGIOGRAPHY

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The figure is a 3D image from a left internal carotid injection. A translucent reconstruction algorithm has been used. White arrow indicates a wide necked aneurysm arising from the anterior communicating artery. These images clearly demonstrate the lumen and are also useful for processes involving the luminal wall, such as atherosclerotic disease.

Three-dimensional (3D) visualisation of radiological images was first achieved with stereo-radiography in the first half of the last century. This was cumbersome and did not find widespread application. Spiral computerised tomography and magnetic resonance imaging made it possible for 3D imaging to become part of every day diagnostic imaging.

With the development of computerised tomographic angiography (CTA) and magnetic resonance angiography (MRA), 3D angiographic imaging was introduced. 3D rendering allows images to be rotated and viewed from any angle. This feature is essential in planning transcatheter interventions. Rotational angiography along with 3D rendering makes true 3D imaging possible during catheter angiography. High resolution along with the ability to view the image from any angle is useful in accurate localisation and evaluation of abnormalities, particularly small aneurysms.