

Neurosurgical Clipping Supported by syngo iDentify

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Case 1

Patient history

56-year-old female

Diagnosis

Persistent hypertension; subarachnoid hemorrhage with Hunt & Hess grade 3, which includes drowsiness and confusion as well as mild focal neurologic deficit. The hemorrhage appeared to be more than 1 mm thick (Fisher III).

Treatment

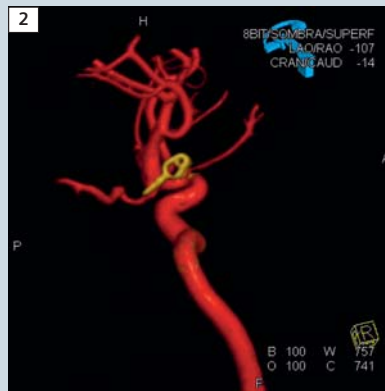
DSA for visualization of a small, saccular aneurysm of the right posterior communicating artery. Morphological details of the vessel tree were generated by syngo InSpace 3D (Fig. 1) and enabled clipping of the cerebral aneurysm with a Yasargil clip under fluoroscopic intervention. Finally the clipped aneurysm was controlled by the use of syngo iDentify (Fig. 2).

Statements

The three-dimensional imaging of the LCA and the inflated balloon helped in deciding whether an interventional procedure would be possible. Additionally, no selective coronary injections were necessary because of the 3D visualization. Thus 25 cc contrast medium was enough for imaging during the whole procedure and syngo DynaCT delivered images in high resolution necessary for making the critical determination between interventional treatment and open heart surgery.



1 High-contrast 3D visualization of vessel tree with the help of syngo InSpace 3D.



2 High-contrast 3D visualization of vessel tree and clip with the help of syngo iDentify.



3 Single shot native.



Neurosurgeon and neuro-endovascular therapist Dr. Hugo Ramirez Luna (left) and T. R. Gilberto Cesar Calvo Garcia, hemodynamic technician in their angio suite.

Case 2

Patient history

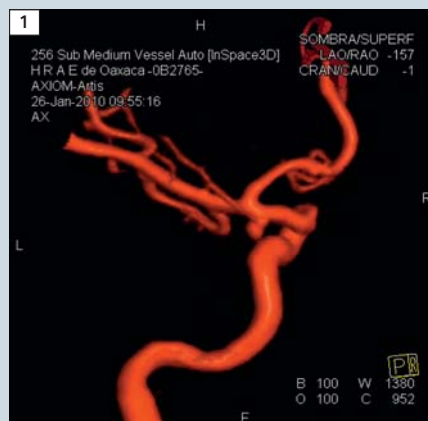
18-year-old female

Diagnosis

Subarachnoid hemorrhage, which indicates a ruptured cerebral aneurysm. Moderate to severe headache, nuchal rigidity, no neurologic deficit other than cranial nerve palsy (Hunt & Hess II). The appearance of the subarachnoid hemorrhage on CT scan was non-evident (Fisher I).

Treatment

A small, saccular aneurysm of the left posterior-communicant aneurysm was shown by DSA. Three-dimensional imaging with syngo InSpace 3D for better visualization of the vessel tree and localization of the aneurysm (Fig. 1). Following a clipping (Yasargil clip) was performed to treat the aneurysm. syngo iIdentify helped to confirm the successful clipping (Fig. 2).



1 High-contrast 3D visualization of vessel tree and aneurysm with help of syngo InSpace 3D.



2 High-contrast 3D visualization of vessel tree and clip with the help of syngo iIdentify.

Contact

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