# Multi-slice CT angiography in diagnosing total versus near occlusions of the internal carotid artery: comparison with conventional angiography

陳啓仁

Chen CJ;Lee TH;Hsu HL;Tseng YC;Lin SK;Wang LJ;Wong YC

摘要

**Abstract**

Background and Purpose— To determine the accuracy of multislice computed tomographic (CT) angiography in diagnosing total versus near occlusions of the internal carotid artery (ICA).

Methods— Fifty-seven ICA total or near occlusions identified by catheter angiography were studied with multislice CT angiography 1 to 3 days after catheter angiography. CT angiography in diagnosing total versus near occlusions was analyzed by 2 radiologists independently. The results were compared with those of catheter angiography.

Results— Catheter angiography depicted 31 total occlusions, including 10 without a stump, 19 with a stump <2 cm, and 2 with a stump >2 cm. Among them, 22 had a downward extent of the retrograde ICA flow at or above the carotid siphon, 8 at the carotid canal, and 1 at the distal cervical ICA. Catheter angiography depicted 26 near occlusions, including 21 with a tight stenosis at the proximal third cervical ICA, 1 at the middle third, and 4 at the carotid canal or siphon. CT angiography correctly depicted all total and near occlusions. In total occlusions, the length of the stump and the retrograde flow were all accurately described by CT angiography. In near occlusions, the sites of tight stenoses were also correctly identified by CT angiography.

Conclusions— Multislice CT angiography had an excellent correlation with catheter angiography in diagnosing total versus near occlusion of the ICA. It may be considered as a substitute of catheter angiography in confirming the ultrasonographic results in

diagnosing total versus near occlusions of the ICA