Selective Enhanced CT

The resolution of computer-assisted image techniques, such as CT and digital subtraction angiography, makes possible the representation of the vessels with a small concentration of contrast medium.

Techniques of intravenous injection, with relatively large amounts of contrast medium, have been described to bring out the vascular structures on computed tomography [1-3].

We have developed a technique for injecting contrast medium that uses a thin gauge needle (23 gauge) for the percutaneous puncture of the carotid artery and a 21-gauge needle for the vertebral artery. Contrast medium (mainly meglumine iothalamate 60%) was injected during the tomography cuts with a rate of 0.2 ml/sec by using an infusion pump. We have performed more than 50 examinations without complications.

Aneurysms have been accurately seen (Figs. 1 and 2) and pathologic structures previously poorly seen have become more evident with this method. The puncture, which is done easily, is nontraumatic and no more difficult than a venous puncture. The use of a thin and sharp needle is the clue for preserving the simplicity of the examination.

Mario Corrales
Clinica Alemana
Santiago, Chile, S.A.

REFERENCES