LECTURE

Mechanical thrombectomy – practical workshop

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Abstract

Mechanical thrombectomy (with or without intravenous thrombolysis) has improved the outcome of patients with acute large vessel occlusion of the anterior circulation, with impressive results: successful recanalization (mTICI 2b or 3) – 59 to 88%; number needed to treat – 3 to 7.

As recent trials have demonstrated the benefit of mechanical thrombectomy, there is a demand for an increased number of well-trained practitioners who are able to perform these procedures. Stent retriever (SR) technique is still the standard of care; however, aspiration techniques have emerged and they have been demonstrated to be as effective as SR. A thorough knowledge of the different arterial approaches, materials and techniques is mandatory in order to improve recanalization rates, decrease procedure times and avoid complications.

Apart from the procedural skills required to manipulate multiple catheters and other devices, mechanical thrombectomy might offer other specific challenges, such as difficult vascular access, patient movement and partial visualization of the intracranial circulation.

Thrombectomy scenario practice using simulators (with specific models and dedicated software) is a useful educational resource for trainees. These might contribute towards an easier, safer and faster training.

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