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Titel des Beitrags:
Fate of the penumbra after mechanical thrombectomy.

Abstract:
In acute stroke, CTP is often used to visualize the endangered brain areas, including the ischemic core and the penumbra. Our goal was to assess the evolution of the infarct after mechanical thrombectomy and to analyze the interventional factors determining the fate of the penumbra. All patients receiving mechanical thrombectomy in the anterior circulation and receiving CTP beforehand were identified. The infarct volume was specified. The clinical parameters, outcome, and interventional results were correlated with the CTP and the final infarct size. In total, 73 patients were included. After mechanical thrombectomy, 78.1% reached a TICI score of 3/2b. The final infarct volume was significantly smaller, with a TICI score of 3/2b compared with less sufficient recanalization (19.60 ± 3 cm³ versus 38.1 ± 9 cm³; P < .001). After TICI 3/2b recanalization, 81% ± 5.2% of the potential infarct size (calculated as the sum of infarct core and penumbra) could be rescued. In patients with TICI scores of 2a or worse, only 39 ± 28.3 were salvaged (P < .001). The Alberta Stroke Program Early CT Score after successful recanalization TICI score of 3/2b resulted in a decline of 1.9 ± 1.4 compared with the significantly higher degradation score of 3.7 ± 1.7 after recanalization, with a TICI score of 2a or worse. A recanalization TICI score of 3/2b resulted in an NIHSS improvement of 7.3 ± 0.8 NIHSS points, whereas a poorer
recanalization improved on the NIHSS by only 2.5 ± 1.5 points (P< .01). Mechanical thrombectomy is a potent method to rescue large areas of penumbra in acute stroke.