

O-007 **GERMAN THROMBECTOMY DATABASE FROM 2012 TO 2014: EXPERIENCES FROM 9,365 ACUTE STROKE INTERVENTIONS**

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Background There is convincing evidence from four independent randomized controlled trials (RCTs) that mechanical thrombectomy is a highly successful therapy for acute stroke patients with proximal artery occlusions. The respective standards need to be implemented in stroke care structures on a larger scale. For setting such standards it is important to monitor thrombectomy outside of trials in standard care.

Methods The German DGNR/DeGIR-database has been developed for quality control and for individual accreditation of interventionalists in interventional radiological procedures. We analyzed all procedures within the DGNR/DeGIR-database that have been carried out in the years 2012 to 2014. In a first step, we are able to report crude numbers and percentages only. Due to participation of more than 100 centers, this database can be considered representative for detecting overall trends on a country level. Moreover, the high number of data allows robust estimations of the rate of rare complications.

Results There were increasing numbers of patients with acute interventional stroke therapy from 2012 to 2014 (n = 2340,

3276, and 3749). The number of participating centers increased from 82 (51 with >10 patients) in 2012 to 113 (82 with >10 patients) in 2014. The mean NIH-SS at time of admission varied from 17 (in 2014) to 18 (in 2012) and 20 (in 2013). The preferred imaging modality was CT/CTA (89%) while MRI was done in 16% of the cases, either additionally or as sole imaging modality. Mechanical recanalization performed in 8875 (94%) of the acute stroke interventions. Stent-retrievers were used in 7604 patients (86%). The rate of intraprocedural extracranial stenting remained within a narrow range of 11% and 13% while the rate of intracranial stent usage steadily declined from 12% to 7%. The rate of successful recanalization was very stable (TICI IIb/III between 83% and 84%). The overall number of intraprocedural hemorrhages was 141/9365 (1.5%, 95% CI: 1.3–1.8) with a steady increase in iatrogenous hemorrhages from 0.8 to 1.1% and a steady decrease of spontaneous hemorrhages from 0.9% to 0.4%. The mRS score at the time of hospital discharge was available in 3645 patients (39%). The rate of early good outcome (mRS 0–2) in these patients was 1447/3645 patients (40%, 95% CI: 38–41). There was no clear trend towards better outcomes during the observation period.

Discussion Recanalization rates, functional outcomes and the rate of intraprocedural hemorrhages are in line with the data of the recently published RCTs. The absolute numbers need to be considered with caution as self-reported rates are usually more optimistic than evaluations by independent adjudicators. During the observation period there were no clear trends towards better outcomes or decreasing rates of rare complications. The data of the German DGNR/DeGIR-database suggest that thrombectomy is generally conducted in German stroke centers with reasonable efficacy and safety. Differences in center performance will be analyzed in a second multivariate approach.

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