The phenox clot retriever as part of a multimodal mechanical thrombectomy approach in acute ischemic stroke: single center experience in 56 patients.

Purpose. We analyzed our experience with the phenox clot retriever as part of a multimodal mechanical thrombectomy (MTE) approach in acute ischemic stroke. Methods. 56 patients were treated by MTE with the phenox clot retriever alone or in combination with other modalities. Results. Overall we achieved TICI 2b/3 reperfusion rates of 61.9%. In multimodally treated patients we achieved reperfusion rates of 72.8%. There were 3 (5.5%) severe adverse events, all symptomatic intracranial hemorrhages. The mean angio to reperfusion times (ART) were 74 minutes for phenox-only procedures and 51 minutes for multimodal procedures. A chronological analysis showed a reduction of ART from 70.5 to 49.4 minutes and an increase of TICI 2b/3 recanalizations from 53.8% to 81.8%. Throughout the observation period there was a significant shift towards multimodal procedures with simultaneous increase of TICI 2b/3 reperfusions. Both effects are partially attributable to our institutional learning curve. NIHSS improvement could be seen in 54% (n = 28) overall and in 73% (n = 15) of MCA recanalizations. Conclusions. The phenox clot retriever is a safe and effective tool for MTE in acute stroke patients, with faster and better reperfusion results when used as part of a multimodal strategy. Clinical improvement is more frequent in MCA recanalizations.