Ischemic

2.3. Treatment

O36 INSIGHTS INTO VESSEL PERFORATIONS DURING THROMBECTOMY: CHARACTERISTICS OF A SEVERE COMPLICATION AND EFFECT OF THROMBOLYSIS

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Introduction Complications associated with thrombectomy remain poorly explored[1-5].

Aim of Study To characterize periprocedural vessel perforation and to assess the effect of thrombolysis on patient outcomes.

Methods In this multicenter retrospective cohort study, consecutive patients with vessel perforation during thrombectomy between January 2015 and April 2023 were included. Vessel perforation was defined as contrast extravasation on digital subtraction angiography. The primary outcome was modified Rankin Scale (mRS) at 90 days. Factors associated with the primary outcome were assessed using proportional odds models.

Results 459 patients with vessel perforation were included (72.5 ± 13.6 years, 59% female, 41% received thrombolysis). Mortality at 90 days was 51.9% and 16.3% of patients reached mRS 0-2 at 90 days. Thrombolysis was not associated with worse outcome at 90 days. Perforation of a large vessel (LV) as opposed to medium/distal vessel (MDV) perforation was independently associated with worse outcome at 90 days (aOR 1.709, p=0.04) and LV perforation was associated with poorer survival probability (HR 1.389, p=0.021). Patients with active bleeding >20 minutes had worse survival probability (HR 1.797, p=0.009). Thrombolysis was not associated with longer bleeding duration. Bleeding cessation was achieved faster by permanent vessel occlusion compared to temporary measures (median difference: 4 minutes, p<0.001).

Conclusion Vessel perforation during thrombectomy is a severe and frequently fatal complication. Thrombolysis does not significantly attribute to worse prognosis. Outcome and survival after LV perforation is worse compared to MDV perforation. Cessation of active bleeding within 20 minutes is critical, emphasizing the need for interventionalists to be trained in complication management.

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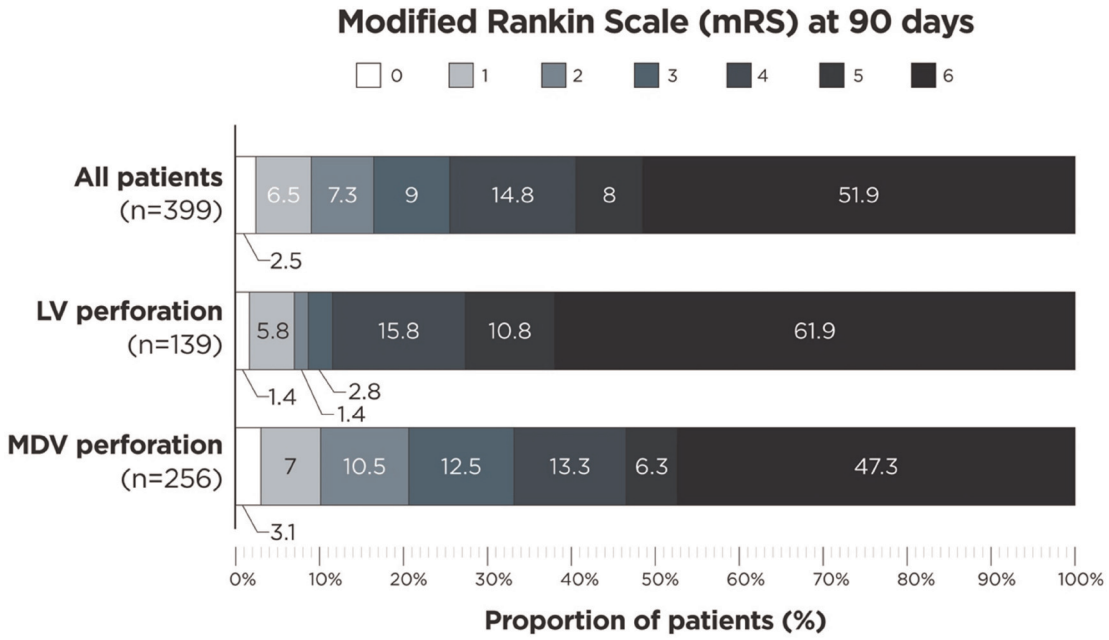
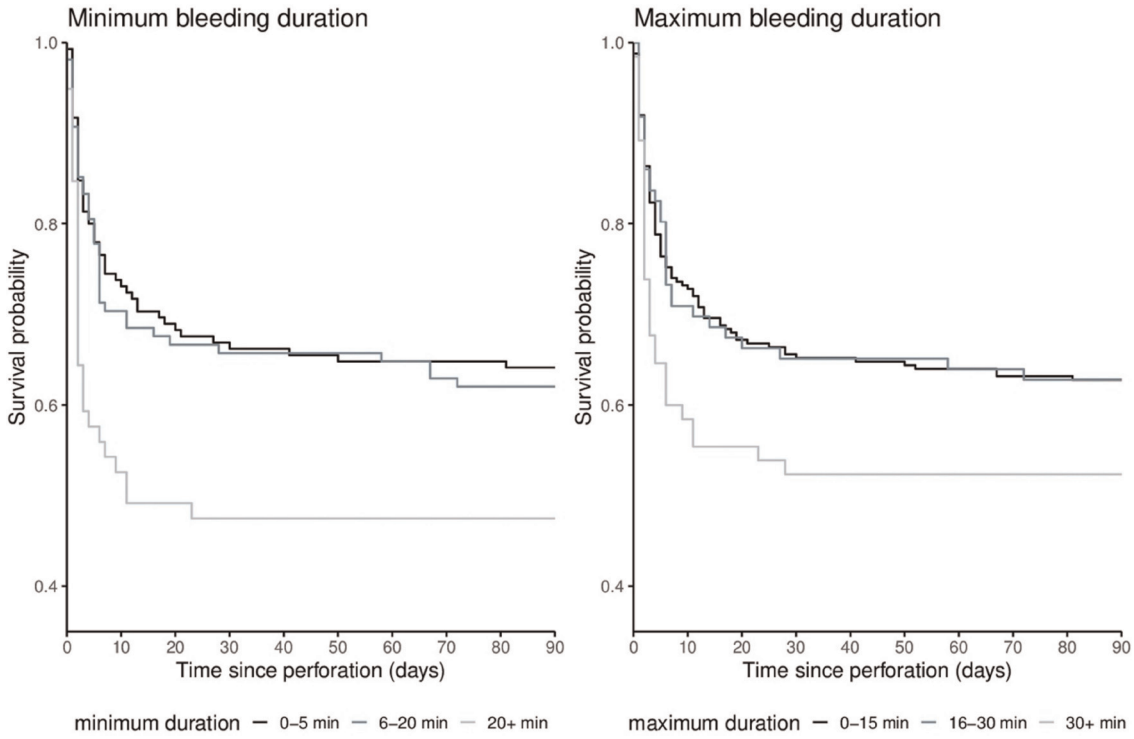


Abstract O36 Figure 1



Abstract O36 Figure 2

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