

SUPPLEMENTAL MATERIAL ON:

Mechanical Characterization of Thrombi Retrieved with Endovascular Thrombectomy in Acute Ischemic Stroke

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Supplemental Methods: The Unconfined Compression Experiment

The unconfined compression experiments were performed with the use of a custom-built force tester, consisting of an aluminium compression plate, attached to a 2,5N load cell (LSB200 Jr. Miniature S-beam load cell, Futek), which was vertically driven by a linear actuator (EACM4-E15-ZAMK, Oriental motor). The actuator was a stepper motor with a resolution of 0.01 mm, stroke length of 150 mm, and a maximal vertical thrust force of 200 N. The heated basin was controlled by a self-regulating temperature system.

Table I. Overview of retrieved and tested thrombi per patient. M1 and M2 indicate middle cerebral artery; ICA-T, internal carotid artery terminus and BA, basilar artery. * indicates the thrombus was too small for mechanical characterization; ** indicates the thrombus was too soft for mechanical characterization.

Patient	Occlusion Location	Pass	Retrieved Thrombi	Tested Thrombi
1	M2	1	A*, B	B
2	M1	1	A	A
3	M1	1	A*, B*	-
4	ICA-T	1	-	-
		2	A, B*, C	A, C
		3	-	-
		4	A, B	A, B
5	M1	1	A, B	A, B
		2	A*	-
		3	A*	-
		4	A	A
6	M1	1	A*, B	B
7	M1	1	-	-
		2	A*, B, C	B, C
8	M1	1	A, B	A, B
		2	A	A
9	M1	1	A, B	A, B
		2	-	-
		3	A	A
		4	-	-
		5	A	A
10	ICA-T	1	-	-
		2	A, B	A, B
11	M1	1	A, B	A, B
12	BA	1	A, B, C, D	A, B, C, D
13	M1	1	A, B	A, B
14	M2	1	A, B	A, B
15	M1	1	A	A
16	BA	1	-	-
		2	A*	-
17	M2	1	A	A
18	M2	1	A**	-
		2	A	A
19	M2	1	A, B	A, B
20	ICA-T	1	A, B, C, D	A, B, C, D
21	M1	1	A*, B	B

Figure I: Flow diagram of patient and thrombus selection.

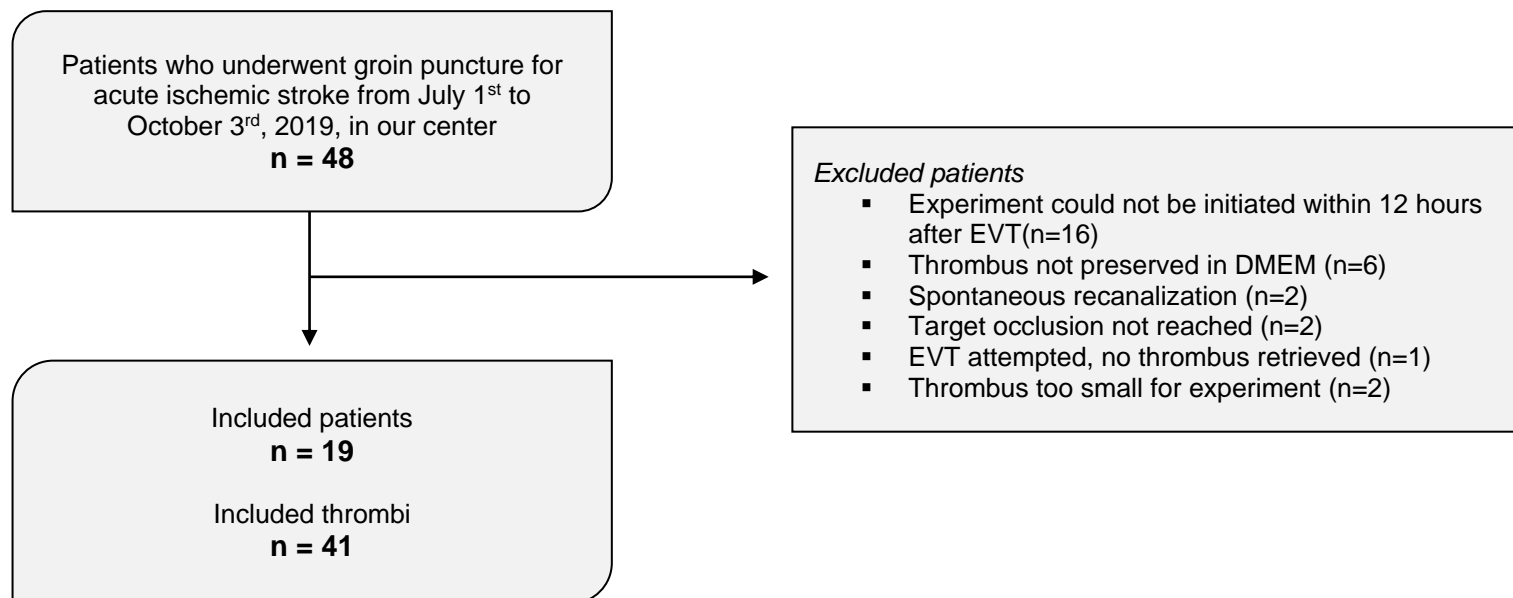


Figure II: Distribution of histological components of all included thrombi on H&E (A) and CD61 immunostaining (B).

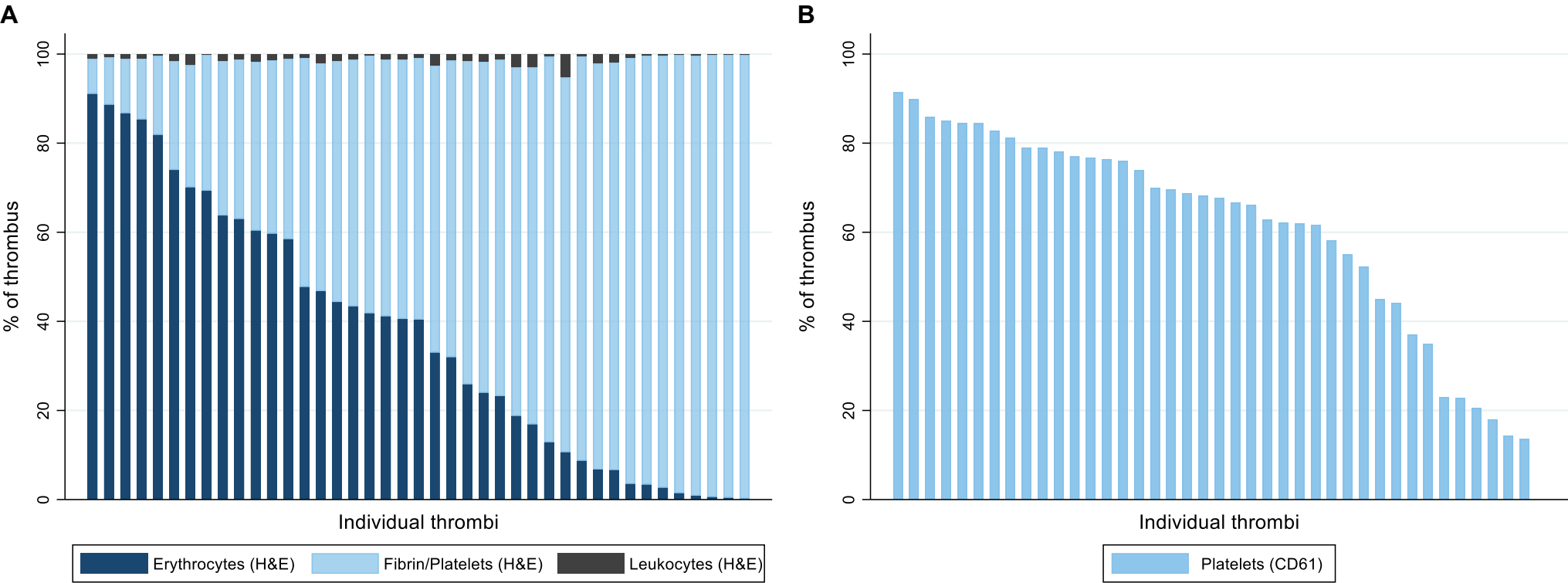


Figure III: Thrombus composition, stratified by pass number. Thrombi from later passes had higher fibrin/platelet content and lower erythrocyte content (not statistically significant).

