

ZODIAC: Zero Degree Head Positioning in Acute Large Vessel Ischemic Stroke

RESULTS: In participants with hyperacute large vessel occlusion (LVO) ischemic stroke awaiting thrombectomy, 0-degree head of bed (HOB) positioning resulted in better neurological outcomes compared to participants with 30-degree HOB positioning.

PURPOSE: To determine if the use of 0-degree HOB positioning prior to thrombectomy in patients with LVO results in greater clinical stability and/or improvement compared to an elevated HOB (30 degrees).

TRIAL DESIGN: Prospective randomized outcome blinded evaluation clinical trial from 12 U.S. hospitals; trial closed with n=92 following recommendations from the Data and Safety Monitoring Board for overwhelming efficacy.

	0-degree HOB	30-degree HOB	HR (95%CI)	Difference (P value)
Primary Endpoints				
NIHSS worsening ≥ 2	1/45 (2.22%)	26/47 (55.32%)	50.5 (6.83-373)	<0.001; Z=5.59 53.1% absolute difference
NIHSS worsening ≥ 4	1/45 (2.22%)	20/47 (42.55%)	32.6 (4.36-243)	<0.001; Z=4.61 40.3% absolute difference

Key Takeaways: Prior to thrombectomy, 0-degree head positioning resulted in better neurological outcomes in participants with LVO suggesting it may be one of the critical first steps in management of patients with LVO during the pre-thrombectomy period.

