Method This study was conducted using the national cardiac arrest registry of OHCA patients with presumed cardiac aetiology who survived to hospital admission from 2009 to 2016. The primary exposure was TTM. The histories of HTN were obtained from patients’ medical records. The endpoint was cerebral performance category (CPC) 1 and 2 at discharge and survival to discharge. We compared outcomes between TTM and non-TTM groups using multivariable logistic regression with an interaction term between TTM and HTN for calculating adjusted odd ratios (AORs) and 95% confidence intervals (CIs) after adjusting for confounding factors.

Results Among 25 985 patients following OHCA survived hospital admission with presumed cardiac aetiology, TTM was performed in 12.2%. TTM group showed better outcomes than non-MTH group: 28.1% vs 15.5% for good neurologic recovery (p<0.0001). AOR (95% CI) of TTM for good neurologic recovery for all study groups was 1.65 (1.47–1.85). In interaction model (generalised linear mixed model), AOR (95% CI) of TTM for good neurologic recovery was 1.87 (1.26–2.76) in patients without HTN vs 0.87 (0.75–1.02) in patients with HTN.

Conclusion TTM is associated with good neurological recovery in non-hypertension group, but not significant effect in hypertension group in Korea.

Conflict of interest None

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