

Letter to the Editor

Hypothermia therapy, neuroprotection and meaningful brain recovery

Madam, We read the recently published article "Therapeutic Hypothermia: Keeping cool inside" by Zeeshan Mahmood¹ with great interest. We have some additional comments elaborating the clinical implications of this promising neuroprotective therapy. We agree that therapeutic hypothermia (TH) has cardioprotective effect and if initiated during extended ischaemia/early reperfusion period, it optimally protects cardiomyocytes from ischaemic insult.² We would like to highlight neuroprotection as the main reason for a resurgence of interest in hypothermia treatment, which was touched on by the author but does not stand out from this article.¹ It has been observed that even small decreases in brain or body temperature result in marked attenuation of ischaemic brain injury.^{3,4} One of the main indications of TH is in patients with out-of-hospital cardiac arrest as mentioned by Zeeshan Mahmood. With reference to the last sentence of his article¹ we agree that TH helps these patients to maintain a normal lifestyle due to "healthy heart". However, the protection afforded by TH may go beyond the heart to include a neuroprotective effect and allow for meaningful brain recovery in patients who suffer from cardiac arrest, stroke, acute traumatic brain injury and neonatal asphyxia. TH is an evidence-based

intervention strategy and there is a need for improved awareness and education regarding this treatment option. While clinically induced hypothermia is beneficial as a treatment to preserve neurologic function, it is not without complications (such as electrolyte and coagulation abnormalities) and these should be carefully watched in these patients.⁵

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References

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