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Letter to the Editor

Management of cardiac arrest in specialist centres

Dear Editor,

We read with interest the study by Yeung et al., showing very low certainty of evidence suggesting that post-cardiac arrest care at cardiac arrest centres is associated with improved outcomes at hospital discharge.[1] We would like to commend the authors on their invaluable work on this topic.

Yeung et al. accepted study authors' definitions and descriptions of the level of services offered as cardiac arrest centres. This has several limitations, in that it is indeed the resources available at these centres that have the potential to impact on patient care, rather than the name e.g. access to 24/7 cardiac catheterisation laboratory, facilities for targeted temperature management etc. There were no indications that all patients received similar care even within the same institution.

Additionally, we are still uncertain over which fundamental treatment in the cardiac arrest algorithm improves outcome. Recommendations continue to change, with the omission of atropine in the 2010 guideline,[2] to the recently questioned practices of administering adrenaline[3] and the placement of an endotracheal tube during cardiac arrest.[4] One area that is showing increasing promise is the use of extracorporeal cardiopulmonary resuscitation, with one study demonstrating 59% of patients having good neurological outcome.[5]

We should also be questioning the financial implications of transporting all cardiac arrest patients to specialist centres. The burden on the receiving institution would be tremendous, not to mention the effects on ambulance services needing to transport patients to centres that may be hundreds of miles away. This takes away resources from other patients, with the problem likely to grow with the ever-increasing population. We appreciate the comparison made between this study and the current management of acute myocardial infarction and stroke, and using them as models to create a similar pathway for cardiac arrest. It must be said however, and this is acknowledged by the authors, that infrastructures for acute myocardial infarction and stroke were based on observational studies rather than robust controlled trials. Establishing an additional pathway, that lacks ground for implementation, risks diverting resources from other important areas.

Ultimately, this study lends itself to more questions than answers. What would be the proposed implementation strategy for the transfer of cardiac arrest patients to specialist centres? Is it even necessary? Should this then be implemented to in-hospital cardiac arrests? Could other non-specialist hospitals be equipped or trained to deliver high-quality cardiopulmonary resuscitation and post-return of spontaneous circulation care?

Conflict of interest

None.

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