PROPOSAL FOR DEVELOPMENT OF PANTHER (PAN-ASIAN THERAPEUTIC HYPOTHERMIA ELECTRONIC REGISTRY)

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Background

- Controlled therapeutic hypothermia is a method of preserving neurological function post-resuscitation.
- Therapeutic hypothermia (TH) after cardiac arrest can possibly help protect patients' neurological function.
- Therapeutic hypothermia is very new in the Asia Pacific, although it is standard of care in many countries in Europe and North America.

Proposal



CRF

- Set up a hypothermia registry in Singapore and across the Asia Pacific through the Pan Asian Resuscitation Outcomes Study (PAROS) network.
- Development of hypothermia registry will allow participating hospitals to collectively enter and manage data.
- A standardized case record form will be adopted across participating hospitals for more seamless data collection and analyzing of outcomes.
- Encourage sharing of best practice and build a platform for further research in TH.

Proposal

- Will utilized ePAROS, a web-based, electronic data capture system (EDC) for data collection and managing of data variables.
- ePAROS is used as a platform for collecting and entering OHCA data under the PAROS network.
- Additional hypothermia module will be created in ePAROS to collect variables such as:
 - Time to reach target temperature
 - Survival outcomes
 - Prehospital and hospital discharge information
 - Neurological outcomes.
- Login ID and password will be created for users to enter and manage data



Data Variables

General Information Gender Race Medical History Prehospital Information Date and time of collapsed Patient brought in by Collapsed Witnessed Arrest location Bystander CPR Prehospital Defibrillation ED Information Date and time of arrival at ED Time attended by doctor First Rhythm at ED ED Defibrillation Medications given at ED Time of ROSC at ED Cause of Arrest Outcome of Patient at ED Inpatient Hospital Information Date of follow up Patient still hospitalised Cooling method Any EEG monitoring Any Seizure during hypothermia Any Cardiac arrhythmia Any Skin Complications Stress ulcer Hyperkalemia Hyperthermia Other treatment

Timings Time of initiation of device Time reach target temperature Total time taken to reach target temperature Time completed cooling Time to initiate rewarming Total time taken to rewarm Time termination of device Outcomes Patient discharged alive or at 30 days post arrest Date of discharged from visit (1 yr follow up) Cerebral Performance Category Overall Performance Category Date and time of death Patient died at Cause of death Death related to index visit

Benefits

- Improve the survival rate of post-cardiac arrest patients
- Better neurological outcomes for patients in Singapore

