Intra Aortic Balloon Pump (IABP) dependent patient transport by a nurse / paramedic as the lead clinician within a stand-alone emergency medical retrieval service.

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Overview

> What is it?

> IABP transportation within South Australia

> Rationale for change

> International and local perspective

> Discuss the leadership role of the nurse / paramedic
What is it?

> Haemodynamic support device

> Percutaneous inserted

> Balloon inflation / deflation
  • Coronary perfusion
  • Afterload reduction
IABP transportation

> Devices in use since 1968

> Transportation a viable option since the mid-late 90’s

> Equipment intensive

> Highly skilled personnel

> Common and safe
  • However not without risk!
Yearly IABP Transport Missions
IABP Transport Platform

Road: 72
Rotary Wing: 8
Fixed Wing: 8
Jet: 8

MedSTAR Emergency Medical Retrieval
IABP Transport Average Distance

MedSTAR Emergency Medical Retrieval
Prior 2009 

- Retrieval teams based within 2 separate level 1 trauma centre ICU's

- ‘In-house’
  - Co-ordination and tasking of team
  - Platform acquisition
  - Flexibility of team configuration
  - Education and training
  - Equipment assets
What happened then..........

> Centralisation of retrieval services

> ‘In-house’
  • Limited flexibility of team configuration
  • Minimal education and training
  • No equipment assets

> Were we providing the appropriate level of clinical care??
Potential problems / benifits Identified

> Crew skill mix
  - Doctor
  - 6 month rotation
  - Paramedic
  - New to IHT
  - Nurse
  - Less in more
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<tr>
<th>Country &amp; Year</th>
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<td>32</td>
<td>Nurse Paramedic</td>
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Registered Nurses / Paramedics

> Opportunity for professional development and improved service delivery

A small group of highly trained people performing a complicated task frequently will deliver safer and more effective patient care than a large group performing a complicated task infrequently.
Retrospective Analysis

- Database review of all IABP cases

- Identification of 3 main issues
  - Electrical
  - Education / Training
  - Logistics
So what to do next……..

> Equipment acquisition

> Development of
  • Standard Operating Procedures
  • Clinical Practice Guidelines

> Logistics
Education and Training

> Multidisciplinary

> Paramedic / Nurse lead

> Scenario based
  • Emergency management

> Competency based assessment
Registered Nurses / Paramedics

> **The ‘clinical constant’**
  > - Small core group doing the work

> **Leadership & Experience**

> **Retrieval practitioners**
  > - “Solo”
  > - Augmentation of team
Summary

> Centralisation of retrieval services within SA provided opportunities for change

> Nurses and paramedics play an important clinical leadership role in the safe transport of IABP-dependent patients

> Benefits of owned assets for education, training and simulation
Questions