

Pre-operative Resuscitation – Preparation for Emergency Surgery in the ED

MsC

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Confession

- Every question thinking ABC
- Trust no-one, Believe Nothing, Give Oxygen

Complex Team



The Obvious



The Less Obvious



Assessment

- Prioritisation
- Appropriate place
- Interventions available in ED
- Plans for initial resuscitation

Initial Resuscitation

- As a priority/ During transfer
- Anaesthetists prefer ABC approach
- Primary bundles initiated
- Source control

Prioritisation

- Two groups
- Under two hours
 - Bleeding/ Head Injury
- Two to six hours
 - Sepsis
 - Ischaemia

Re-assessment

- Prioritisation
- Appropriate place
- Further investigations
- Progress
- Communication

Communication

- People to be informed
 - Theatre co-ordinator
 - Anaesthetic co-ordinator
 - ICU registrar/ nurse in charge
 - Other ?IR etc

Primary Bundles

- Based on the work of Rivers
- Initially for sepsis but principles applied
- Priority after ABC resuscitation
- Ongoing with transfer

Septic Bundle

- Measure lactate
- Blood cultures
- Broad spectrum antibiotics
- 30ml/kg crystalloid for hypotension
- Consider vasopressors

Trauma Bundles??

- Nil official in UK
- Principles of care
 - Airway
 - Lung injury/ Respiratory
 - Assess bleeding/ Vascular access
 - Neuro function/ Spinal column care
 - Temperature

Airway

- Maintenance of patent airway
 - Paramount
 - At least two people until otherwise indicated
 - Adjuncts/ Trained operators
- Intubation
 - Preparation
 - Trained operators
 - DAS guidelines

Breathing

- Adequate Ventilation
- Proper ventilator
- CO₂ monitoring essential
- Amount of oxygen for journey/ intervention

Circulation

- Hypotensive resuscitation
- Large bore peripheral access
- Monitoring important
- Blood / Blood products with patient

Transfer

- Equipment to manage A
- Ventilator/ Back up for B
- Fluids/ Blood/ Vasoactive for C
- Medications to keep them asleep
- Temp control

Monitoring

- Essential
 - If intubated O₂/ CO₂ monitoring
 - Heart Rate/ ECG
 - Blood Pressure
- Desirable
 - Invasive monitoring
 - Temperature

Information

- Consent form
- Allergies
- Interventions undertaken
- Medications given
- No standardised handover

Lines

- Resuscitate peripherally
- Large bore IV access
- Arterial line secondary consideration
- CVC secondary consideration

