Shock

Author: Paula Lister 2005
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Associated clinical guidelines/protocols:
- Meningococcal septicaemia

Fundamental Knowledge:

List of topics relevant to PIC that will have been covered in membership examinations. They will not be repeated here.

Pathophysiology:
- Age specific definitions.
- Aetiologic classification.
- Simple clinical features

Information for Year 1 ITU Training (basic):

<table>
<thead>
<tr>
<th>Year 1 ITU curriculum</th>
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<tbody>
<tr>
<td><strong>Pathophysiology:</strong></td>
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<tr>
<td>Concepts in the pathogenesis of shock</td>
</tr>
<tr>
<td>Sequelae of shock, relationship to multi organ dysfunction syndrome (SIRS, septic shock and MODS covered in detail in separate module)</td>
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<tr>
<td><strong>Clinical skills:</strong></td>
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<tr>
<td>Clinical recognition of shock and assessment of severity.</td>
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<tr>
<td>Management of shock according to aetiology, in response to haemodynamic &amp; physiological data.</td>
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<tr>
<td>Use of intravenous fluids: colloids, crystalloids &amp; blood products.</td>
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Curriculum Notes for Year 1:

Many of the papers I have supplied are review articles. They will discuss recent advances and sentinel works. They can give you an overview of the subject, but should never replace the original work. I encourage you to critically read the original research.

Pathophysiology of shock:
- **Basics** are covered in the following 2 papers:

  There is some repetition between them.

- **Sequealae of shock & Relationship to MODS:**
  1. Review paper by Donald Fry:


### Classification of shock:

Shock has traditionally been classified as described below. While the trigger initiating shock may fall within one category, the shock episode will have elements conforming to all categories. This limits the usefulness of such a classification.

**Hypovolaemic shock**
- *Fluid loss*
- *Blood loss*
- *Capillary leak syndrome*

**Distributive shock (n or ↑ CO)**
- *Anaphylaxis*
- *Sepsis*

**Cardiogenic shock**
- *Reduced contractility*

**Obstructive shock**
- *Thrombosis/embolism*

**Cytotoxic shock**

### Septic Shock:
Management guidelines were discussed in the module “Sepsis, SIRS & MODS”

The following are important papers.


### Cardiogenic shock:

See cardiac modules.

### Spinal Shock:

Information for Year 2 ITU Training (advanced):

<table>
<thead>
<tr>
<th>Pathophysiology:</th>
<th>Clinical skills:</th>
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<td>Knowledge of clinical research in the area, potential therapies related to immune and inflammatory pathway modulation</td>
<td>Outcome prediction in shock states.</td>
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Curriculum Notes for Year 2:

More Pathophysiology:

More Therapeutic concepts:

Outcomes: