simulation training for recognising and responding to clinical deterioration

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Outline

- What we teach & why
- The use of simulation
What we teach

• CRM - teamwork
  – many different inter-professional groups

• Coat & Review - systematic approach
  – junior staff up to HMO3s/ward nurses
Key Points of CRM (Gaba)

• Know & optimise your environment
• Anticipate and plan
• Call for help early
• Communicate effectively
• Ensure leadership & role clarity
• Distribute the workload & use all available resources
• Allocate attention wisely & use all available information
COAT & Review

a structured approach to the unwell patient for junior staff
CONFIRM-OPTIMISE-ASSESS-TREAT-REVIEW

can be used in all degrees of emergency from cardio-respiratory arrest to the less urgent patient review

More than just “ABC”
Need to identify any potentially life threatening problems early

A structured approach facilitates this

Any problems identified must be managed immediately

It is possible to treat physiology without knowing the pathology
CONFIRM
Rapidly evaluate the situation

• Confirm status of DR ABCD
  - confirm if a problem exists
• ABC comes before diagnosis
  - the status of ABCD sets the pace

*An patient with a severe problem with A, B or C is dying for you to do something… QUICKLY!*
CONFIRM
Rapidly evaluate the situation

• Look at the patient before looking at other sources of information

• If your initial assessment of the patient doesn’t involve actually *touching the patient* you’re probably not doing it right!
OPTIMISE
Make the patient safe

• Support ABC’s
  - buys time for a careful assessment
  - don’t let the lack of a diagnosis get in the way
• Remove precipitants/aggravating factors
• Position patient
• Attach monitoring
• Prepare emergency equipment
ASSESS
Gather information for diagnosis

• Make a point of seeking information from the nurse
  Patient assessment is a team sport
• History & Patient Notes
• Examination, Charts, Monitoring
  - examine everything around the bed
  - observation charts can be full of useful clues/trends
• Investigations
• Diagnosis & Differentials
**Airway**
- **Is the airway patent?**
  - Speech: Can the patient speak?
  - Noses: Is there snoring or stridor?
  - Is there paradoxical breathing?
  - Inspect for foreign bodies

**BREATHING**
- **Assess Ventilation**
  - Is patient breathing? Look, listen, feel.
  - Rate: What is the respiratory rate?
  - Depth: Is the chest rising & falling?
  - Effort: Is there excess respiratory effort?

- **Assess Oxygenation**
  - How much O₂ is the patient getting? Do they need more?
  - Is there cyanosis? What is the SaO₂?
  - Assess conscious state

**CIRCULATION**
- **Assess Pulse**
  - Is there a pulse?
  - Rate: What is the heart rate?
  - Rhythm: regularity (ECG if extreme HR)

- **Assess Perfusion**
  - What is the blood pressure?
  - Is patient pale/sweaty/shut down?
  - What is the urine output?
  - Assess conscious state

- **Assess IV access: present/adequate?**

**DISABILITY**
- **Conscious State: AVPU**
  - Pupils: equal & reactive?
  - Neurological Asymmetry: look for focal signe/asymmetry

**Airway Maneuvers**
- Jaw Thrust
  - "Sniffing" position

**Remove Foreign Bodies**
- Suction

**Simple Airway Devices**
- Oropharyngeal "Guedel" Airway
- Nasopharyngeal Airway

**Bag & Mask Ventilation**
- **Position:** Sit Patient Up
- **High Flow Oxygen**

**Cardiac Arrest Protocol**
- Cardiac compressions
- Adrenaline
  - +/- Defibrillation

- **Position:** Lie Flat
- Consider elevating legs

**Fluids**

**Insert IV Access**

**Support ABC’s**
- **Check & Treat Blood Glucose**

*Contraindicated in trauma if potential cervical spine injury exists. In this circumstance neck must be immobilized.*

**AVPU Scale**
- A: Alert
- V: Response to Voice
- P: Response to Pain
- U: Unresponsive

* If you are a P or a U you are in the PU!
TREAT
Therapy for underlying cause

- Formulate a plan
- Communicate the plan
  - ISBAR
REVIEW

• Timely reassessment
• if patient state changes *at any stage* then return to CONFIRM
Advantages of using this approach

- Helps organise one’s thoughts
- Limits irrelevant distraction
- Helps with prioritisation
- If used every time will become automatic
- Important problems are less likely to be overlooked
How do we teach this?

As an inter-professional ‘drill’ in our simulation environment
“Pause and Discuss” Simulation Scenarios

- Interim Step between a clinical skills workshop & a fully immersive scenario
- Scenario is intermittently ‘suspended’ to discuss the issues that emerge
Survey of Anaesthetic SRMOs

• Received COAT & Review training at orientation
• surveyed in October 2009
• N = 11 (of 12)
1. Has the COAT & R teaching influenced the way you think about approaching an unwell patient? 100% responded YES

2. Have you used the COAT & R format in the clinical environment for approaching an unwell patient? 100% responded YES

3. If so, was COAT & R useful? 100% responded YES
Nursing uptake

• A nursing admission document including risk assessments etc
• A care plan
• A protocol/standard of assessment on a shift by shift basis
More information available at: