Safer Care: Beyond the Ward Round

SAM 2014 Conference
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Safer Care: **Before** the Ward Round

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Ward rounds performed well.....

- Improve care
- Reduce Errors
- Reduce length of stay

- But......patients critical hours are often before the ward round
Safer care prior to the ward round

- Initial Assessment
- Emergency Medicine Department Management
- Handover

- But we don’t always get things right – but not always willing to change the way we work
Initial Assessment

• Should there be one single access point?
• Initial News and Lactate for all
Emergency Medicine Department Management: Difficulties of providing safe care

- High turnover of patients
- Managing diverse clinical conditions simultaneously
- Variable shift patterns
- Rapidly evolving situations
- Poor communication
- Unstable patients
- Involvement of many disciplines
- Time constraints
- Multiple interruptions

Characteristics of the ED
Made worse by a lack of flow
“Age? You mean now or when we first sat down?”
To provide safe care in Emergency Medicine….

• Not about being all knowing and all knowledgeable

• Is about realising we are fallible, can make mistakes and trying to mitigate against it

• We must change the way we work
  – Prevent primary victims
  – Prevent secondary victims.
BLEATING ON ABOUT HUMAN FACTORS AND CREW RESOURCE MANAGEMENT AGAIN?
Basically It is common sense....

1. Maintain Situational Awareness
2. Prevent fixation errors
3. Working as a team and leadership/followership
4. Know your environment and team
5. Communicate Effectively including safe handovers
6. Anticipate and Plan
7. Use cognitive aids – Checklists/prompts cards
8. Call for help early
9. Debrief and learn from cases
Communicating effectively

• The missed dose of antibiotics – learning from the Chinese Takeaway Industry: Feedback Loop

• Bad decision of chest drain – learning from the military: PACE Communication
Prompt Cards/Checklists

- Had checklists for procedures
- Had ‘black book’ guide - not easy to access on intranet
- No airline-type prompt cards
- I made a potentially serious error
- Needed to change the way I (and others) worked
Thrombolysis of PE

- 7.38am (after a very long tiring night)
- 73 year old man - ASHICE call probable AAA
- Pre-hospital Info on available on arrival
  - Good quality of life
  - Complained to wife of abdo to back pain.
  - Recently discharged from hospital following amputation
- By time Ambulance had arrived:
  - un-recordable BP, Very slow weak pulse
  - sats unobtainable,
  - Unconsciousness
On arrival

• Seen by A&E Consultant and Registrar
• Anesthetic team fast bleeped

  – Abdomen soft. Fast scan – no free fluid – no enlarged AAA.
    • Quick look echo - poor contractility, no evidence of tamponade

  – Quick look chest US- no evidence of tension pneumothorax

  – Amputated leg, looked like a recent operation
Initial Management

- OPA, bag valve ventilation
- Atropine
- Fluids
- ABG – pH = 7.03, pCO2 = 8.7, pO2 = 2.4, BE = -13, lactate = 10. Hb- 12 ? Venous but probably arterial
- Prepare to intubate
- After 2 minutes of being in resus - arrested
Initial CPR management

• 2x cycle
• PEA throughout
• Weak Pulse back after two cycles
• Intubated (with checklist!) but quickly and with adrenaline 100mcg pre intubation
• CO2 trace very poor (but consistent with being in correct position)
• Repeat Blood gas pH<6.8, PO2 – 2
• ECG sinus tachycardia – T wave inversion in III
Thought Processes

• Cause of Low BP
  – From initial history ?AAA/ ? Thoracic dissection/ ? Massive MI
  – From assessment ? PE

• No time for CTPA as about to arrest again

• Decision for thrombolysis
Thrombolysis Given

• Asked for thrombolysis drugs
• Tenectaplastase found quickly
• No one sure of dose. Unable to locate guidelines quickly on trust intranet) and no time as about to arrest) –therefore given full dose of 100mg iv stat
Ongoing clinical events

- Rearrested 20 seconds after tenectaplastase given
- Eventually stabilised
- Went to ITU
- Discharged from hospital 7 days later with normal quality of life

- Once stabilised went for CTPA/Echo which confirmed a Massive PE
Learning from Case

• Correct Treatment

• But.......  
  - Wrong Drug  
  - Wrong Dose  
  - I was lucky  
  - If he had died - could I have justified not knowing or being able to quickly find out correct dose?

Potentially, one of the solutions is prompt cards – give space for the higher thinking to the clinician whilst reduce errors
# The Range of Prompt Cards

## Transfers and Briefings
1. Trauma Team Briefing
2. ASHICE Team Briefing
3. SECamb to Resus Handover
4. Pre-Transfer Checks
   4a) Arrival Checks

## Medical Emergencies
5. Sepsis – Management within 1st hour
   5a) Not Responding to Initial Management
6. Hyperkalaemia
7. Massive Pulmonary Embolus (Thrombolysis)
8. DKA Management
9. Asthma – Life Threatening
10. Unexplained Hypotension
11. Seizures / Status Epilepticus

## Resuscitation Council UK (2010)
12. Adult Advanced Life Support
13. Paediatric Advanced Life Support
14. Newborn Life Support
15. Tachycardia Algorithm (adult)
   15a) Emergency Cardioversion (DCCV)
16. Bradycardia Algorithm (adult)
   16a) External Pacing
17. Anaphylaxis Algorithm

## Procedures
18. RSI (Rapid Sequence Induction)
19. Emergency checklist for RSI
20. Sedation Checklist
21. Code Red
22. Thoracotomy in Trauma
23. Central Venous Catheter (CVC) Insertion
24. BIPAP
25. Organ Donation
   Emergency Cardioversion (DCCV) – see 15a
   External Pacing – see 16a

## Medications
26. Naloxone (& Infusion)
27. Aminophylline Infusion
28. Salbutamol Infusion
29. Starting Inotropes

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Remember to DOCUMENT!
**IF YOU SUSPECT MASSIVE PE & PATINET IS PERIARREST**

1) Is it safe to go for CTPA? OR Should you just treat?  **SEE ‘CT TRANSFER’ PROMPT**

2) **COULD THIS BE** – ?Tension Pneumothorax or ?Cardiac Tamponade

3) **THROMBOLYSE.**
   - **ARREST/PERI-ARREST:** Give **50 mg IV BOLUS ALTEPLASE** (arrest or peri-arrest), repeat after 15 minutes if no ROSC. (Max 100mg)
   - **STABLE:** Alteplase (rTPA) 10mg IV over 1-2 mins, then 90 mg infusion over 2 hrs (**max??** dose 1.5mg/kg in patients < 65 kg)

4) **HEPARIN** – After 3 hours if APTT ratio < 2.0, start IV Heparin infusion - as per **Standard IV heparin protocol** (5000 Unit bolus IV over 5 minutes, then 16 units/kg/hr & 6 hour APTT Check).

5) Get **LUCAS** from Cardiothoracic Unit. If you thrombolyse in arrest, or they subsequently arrest  CPR should be continued for **60 minutes**.
Emergency Prompt Cards

Dr Rob Greenhalgh, Brighton and Sussex University Hospitals NHS Trust, along with Dr Rob Galloway (ED Consultant), Dr Duncan Bootland (ED Consultant) and Alice Edmondson (ED Resus Sister) has developed a number of emergency prompt cards which he has kindly allowed us to share. You can download a copy of the PDF document here: Prompt Cards Mar2014_Electronic. [...]
Safer Handover

• Use of **SBAR** to make a referral
• Medical Team accepting referrals should also use SBAR to confirm. **Speak Back and Repeat**

• In the recommendations section of a handover should this be standardised?
  – Mandatory to have a resuscitation/escalation of care decision thought about?
  – Referring team know what to say
  – Accepting team Know what to ask
Safer Care Before the ward Round

- Imperative to get first few hours right as often by time of ward round – too late!
- Single point of access/importance of triage
- Realise we are fallible and try to mitigate against that
- Better communication skills
- Use of Prompt cards
- Safer Handover
Key to better Care: A&E and Acute Medicine working together