DCCM Trauma: Tip of the Ice Berg

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Introduction

- Review trauma admission to DCCM
- Discuss
  - trauma mortality trends
  - challenges around trauma deaths
  - bereavement follow-up outcome following a death from trauma

DCCM Trauma Admissions

	Total admissions	Trauma admissions
• 1998	1070	190
• 1999	1090	209
• 2000	1146	174
• 2001	1157	172
• 2002	1100	188
• *Median*	*1100*	*188*

Admission Characteristics 2002 n=188

- Road Crash 101
- Fall 32
- Blow 21
- Blunt 21
- Jumper 4
- Stabbing 4
- Laceration 2
- Penetrating 2
- GSW 1

DCCM Trauma Deaths

	Trauma Adm.	Deaths	Mortality
• 1998	190	42	22%
• 1999	209	37	18%
• 2000	174	15	18%
• 2001	172	24	14%
• 2002	188	34	18%
• ***Median***	***188***	***34***	***18%***

Characteristic of Trauma Deaths

2002 n=34

- 8 certified brain dead (IT withheld)
- 9 deaths were of non-cerebral cause (WH WD)
- 17 severe cerebral damage - 16 had intensive therapy treatments withdrawn

2002 Characteristics Trauma Deaths

- Age 17- 85 years median 33 yrs.
- Admission to death time:

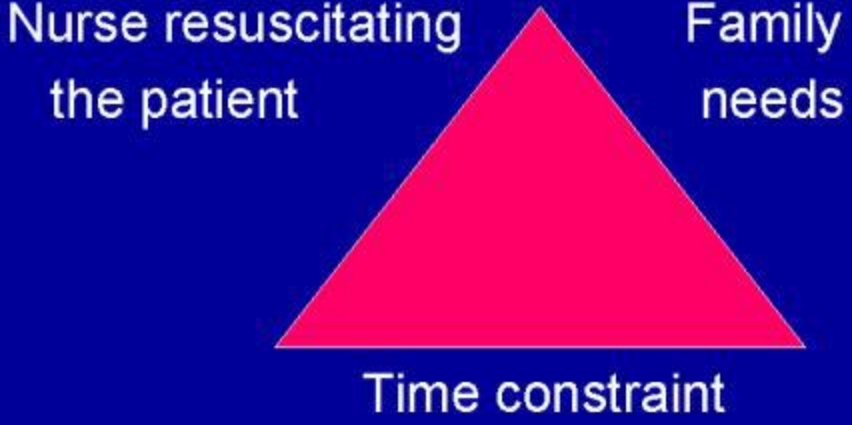
  15 minutes to 19 days median 40 hours (only 3 under a day)
- The majority of these patients have had comfort cares initiated prior to death

Challenges with a Trauma Death

- Commonly within 40 hours of admission
- Need to develop trust & rapport with family
- Every communication has to count
- Family are in a state of shock
- May regress to age 8 -15 years (emotionally and in comprehension)
- Communication needs to be:

  clear, simple, uniform and repeated

The Challenge



Current Practice

- General Information Pamphlets:
  Visiting, Coping with an admission
- Specific Information pamphlets (TBI, CBD)
- Teaching Boards
- Family Meetings
- Standard services : Chaplain, SW, KA
- Bereavement Follow-up Service

Why The Long Wait ?

Many cares must be done for the patient when they arrive here. This could take an hour or so to complete.

Some patients are sicker than others so it takes longer.

These are some of our routine admission procedures.

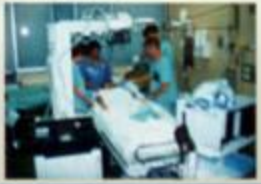
1. The patient arrives in Critical Care and is transferred to an intensive care bed.

2. Oxygen and suction used to monitor the patient are attached to enable us to monitor the vital signs ie. blood pressure and pulse.

3. If they have trouble breathing, a breathing machine can be attached.

4. Lots of medicine and fluids may be needed. A drip into a big vein may be put in.

5. With all the tubes and breathing machine in place our patients have a chest X-ray. other X-rays may also be needed. **This takes time**



6. **Sorry for the wait** - you can come in now.
Please ring the visitors bell when you start again. You may have to wait a short time if we are busy caring for your relative.

End of Life Care

- May be very quick once intensive therapies not escalated
- Family encourage to be with their relative and Involved in care
- To tell us about this patient, this aids us in getting to know them and encourages them to reflect on the person's life and not just the shock of the trauma

Aims of Bereavement Service

- Contact next-of-kin as index person
- Quantify aspects of perception of the death
- Determine bereavement process
- Outstanding problems
  - Listen, provide information and clarify
  - Refer to other agencies, not counselling
- Collect key indicators to monitor changes

Overview of System

- Establish bereavement data form - pilot
- Establish bereavement team
- Identify all deaths in DCCM
- Contact next-of-kin 4-6 weeks later
- Conduct structured telephone interview

Overview of System

- Enter responses into DCCM database
- Ongoing analysis and feedback
- Next-of-kin
  - no legal hierachy
  - selection made by patient/family
  - details recorded during admission
  - in electronic medical record

Follow-up system

- Bereavement pamphlet posted within 7 days - introducing bereavement team
- Pt. record front sheet & clinical summary
- Next-of-kin telephoned
- Interviewer and purpose introduced
- Permission to interview obtained

Data Analysis and Feedback

- Reports of interviews undertaken
  - written by team member every 2 months
  - circulated to all DCCM staff
- Annual data formally analysed & circulated
- Recommendations made
  - clinical, administrative, managerial
  - implemented in large part

2002 Trauma Death (n=34) Bereavement Follow-up Findings

- 5 no contact made (letter sent)
- 20/29 NOK female
- 19/29 - at risk relationship (mother, spouse)
- Call duration ranged from 5 to 60 minutes median 15 minutes (20min total median)
- 13/29 had been in contact with GP
  - 4 contacted by the GP
  - 9 NOK contacted GP

Findings n=29

- 28/29 thought they were well informed by the medical and nursing staff
- 6/29 did not understand the sequence of events that led to the death
- admission to death of 15 min mother arrived after the death. Meeting set up with ED staff

Findings n=29

- 19 back to previous paid employment
- 2 employment status changed due to death
- 25 back to normal activities
- 27 had family friend support
- 11 were in financial difficulty
- 19 had sleep pattern changes

Comments

- “Still waiting for a miracle”
- “What was said was all mixed up in her head” but didn’t want another family meeting yet
- “Understood the gravity of the situation from the onset”
- Await Coroners report for clarification
- Waiting for police, thought she had killed her mother (RC)

Best Outcome

- Family felt supported
- Family were fully informed - variety of communication methods
- Understood sequence of events
- Wide range of resources made available
- Follow-up completed

Conclusion

- Trauma deaths are always a shocking event for the family & challenging for staff
- Excellent communication needs to be maintained to ensure the family hears
- Good systems - imperative for best outcome
- Follow-up allows confusion to be clarified and issues sorted so that the family can start the process of re-ordering their lives