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
<table>
<thead>
<tr>
<th>Year</th>
<th>Total admissions</th>
<th>Trauma admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>1070</td>
<td>190</td>
</tr>
<tr>
<td>1999</td>
<td>1090</td>
<td>209</td>
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<tr>
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<td>1146</td>
<td>174</td>
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<td>2001</td>
<td>1157</td>
<td>172</td>
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<tr>
<td>2002</td>
<td>1100</td>
<td>188</td>
</tr>
<tr>
<td>Median</td>
<td>1100</td>
<td>188</td>
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</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Year</th>
<th>Trauma Adm.</th>
<th>Deaths</th>
<th>Mortality</th>
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<tbody>
<tr>
<td>1998</td>
<td>190</td>
<td>42</td>
<td>22%</td>
</tr>
<tr>
<td>1999</td>
<td>209</td>
<td>37</td>
<td>18%</td>
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<tr>
<td>2000</td>
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<td>15</td>
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<td>2001</td>
<td>172</td>
<td>24</td>
<td>14%</td>
</tr>
<tr>
<td>2002</td>
<td>188</td>
<td>34</td>
<td>18%</td>
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</table>

**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- 17 severe cerebral damage - 16 had intensive therapy treatments withdrawn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

Nurse resuscitating the patient

Family needs

Time constraint
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 care must be done for the patient when they arrive here. This could take an hour or sit to complete.

Some patients are sicker than others so it takes longer.

These are some of our routine admission procedures:

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

2. This exam and blood tests are required for the patient may be required to mount the bed. The nurse assesses the patient for the medical condition and stability.

3.班 the patient's mouth and nose, an oxygen mask is placed. The blood pressure and pulse are checked.

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

5. With all the tests and breathing machines in place, our patients have a check up. Often the tests and breathing machines are needed. This takes time.

6. Being for the wait: you can come in now. Please ring the rider bell when you are ready. This may take a while and you are being cared for during your waiting.
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 hierarchy
  - 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