Frailty, ceilings of treatments and end of life decision making

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Quote from a colleague...

• “I’m tired of making people better so that they can die” Dr Granville Morris
Maybe we should just try a course of meropenem.
Frailty?

• A syndrome with 3 fundamental problems:
  1. Reduced reserve
  2. Vulnerability to stressors
  3. An association with poor outcome
Various Definitions

1. A *phenotype* (as described by Freid and Mor) with certain characteristics such as weakness, weight loss, slow walking speed etc

2. A *state* of vulnerability caused by gradual deficit accumulation (Mitnitski and Rockwood)
Implications

• Higher function failure
  • Cognition
  • Mobility
  • Continence
  • Independence
The Issue

• 60-70% of in-patients are frail\textsuperscript{1}
• They may not have been admitted with a frailty syndrome (12%), but frailty is still lingering underneath
• “For every complex problem, there is an answer that is clear, simple and wrong”\textsuperscript{} H.L Mencken

\textsuperscript{1}RCP. Acute Care Toolkit 3. RCP 2012
The Issue

- 10% loss of muscle mass after 3 days in bed
- 50% loss of muscle strength after 3 weeks in bed
Some frailty related data

• Delirium carries a 50% mortality at 1 year\(^1\)
• In-patient falls carry a 40%+ mortality at 1 year\(^2\)

Time for some interaction...
What is the 30 day mortality of patients admitted to hospital from care homes?¹

A. 10%
B. 20%
C. 30%
D. 40%
E. 50%

¹Graverholt, B. et al. Acute hospital admissions among nursing home residents. *BMC Health Services Research* 2011.11:126
What is the most commonly cited reason for DNACPR?¹

A. Acute kidney injury
B. Cancer
C. Dementia
D. Frailty
E. Heart failure

¹Haden, A. and O’Mahoney, S. Frailty and DNACPR decisions. 2016. Cardiff University.
What is the in-hospital mortality rate of patients who need assistance with ADLs?

A. 5%
B. 10%
C. 15%
D. 20%
E. 25%
What proportion of all hospital deaths need assistance with ADLs before admission?

A. 40-50%
B. 50-60%
C. 60-70%
D. 70-80%
E. 80-90%
What proportion of patients needing help with ADLs are offered a resuscitation discussion in hospital?

A. 0-10%
B. 10-20%
C. 20-30%
D. 30-40%
E. 40-50%

30% of patients were made DNACPR, but only 16% of cases were discussed with the patient and/or family.
So, what is the conclusion?

• We are not providing the best treatment for our patients
  • *A Time to Intervene*\(^1\) describes this

\(^1\)NCEPOD. *A Time to Intervene. NCEPOD 2012.*
A case we’ll follow

• 86 year old man admitted with a fall...
• Not much medical history
• “It’s reversible”
Would you escalate?

A. Yes
B. No
Note: This was a well elderly cohort which still had a mortality of 49% at one year.

And...

- All patients saw a reduction in ADL autonomy at discharge that did not recover at 12 months
He deteriorates on CPAP
Would you ventilate?
A. Yes
B. No
Unadjusted 1-year change in activities of daily living (ADL) disability (top panel) and mobility difficulty (bottom panel) scores. Nonhospitalized beneficiaries show small increases in disability over the year. Among those who are hospitalized, survivors of mechanical ventilation (MV) experience steeper increases in disability than those who did not receive MV (differences in the unadjusted “post” scores between hospital survivors without MV and with MV for ADL disability \(P = 0.0008\) and mobility \(P = 0.0002\)).

He has an intractably low BP
Would you start vasopressors?
A. Yes
B. No
Sim, Y. et al. Mortality and outcomes in very elderly patients 90 years or older admitted to the ICU. *Resp Care* 2015; 60(3), pp. 347-355

• He’s discharged to the ward and eventually home immobile with carers QDS
• Total LOS 186 days
• Readmitted 5 days later with HAP with low BP, type 2 respiratory failure and low GCS
What do you do?

A. Admit to ITU
B. Treat actively on ward – For CPR
C. Treat actively on ward – DNACPR
D. Palliate - DNACPR
• Receives active treatment on ward with DNACPR
• Dies <24h later
What is the NNT for octogenarians with CPR to get one home?

A. 0-10
B. 10-20
C. 20-30
D. 30-40
E. 40-50

So what does this tell us that we don’t already know?

It’s not about reversibility

It’s about FUNCTION

Frailty predicts outcome
Age does not
So what is it about?

1. Know your patient
   • Functional ability and trajectory
   • Have clear documentation regarding this
   • It needs to be available to EVERYONE
   • Current nursing documentation is not fit for purpose – both *fundamentals of care* and the *emergency assessment* document
So what is it about?

1. Being clear with patient and families about what goals are
   • What functional outcome will they accept?
     • Being immobile?
     • Being cognitively impaired?
     • Needing help for ADLs?

2. Considering frailty and escalation variables
   • Nutritional status
   • Ventilation/vasopressors

3. EARLY and appropriate conversations with frail patients/families re: escalation/resuscitation
Some of the ways I approach DNACPR/treatment decisions in those without capacity

• Functional goals
• Likely outcomes

And

• “If your mum/dad were standing here watching what we are doing, what would they tell us to do?”
So, knowing all of that, would you have escalated our 86y old?

A. Yes
B. No

0% 0%
“Let us redefine progress to mean that just because we can do a thing, it does not necessarily mean that we must do that thing”

Federation President, Star Trek VI, The Undiscovered Country
Thank-you

Questions?