Frailty – an oncologist’s prospective

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Plan

• What is frailty and why is it important
• Selecting the right patient for the right patient
• Can we improve outcomes for frail patients?
• Difficult conversations
Why does it matter

Image by Videoplasty
Current situation

More than 1/3 of cancers are diagnosed in people over the age of 75 years

Over 50% of cancer deaths occur in the elderly
Frailty and older patients
Frailty phenotype

Multi deficit model

Rockwood et al
Fit to frail

- Fit - suitable for standard treatment

- Vulnerable – Need full assessment and support suitable for standard treatment

- Frail – Unsuitable for standard treatment, don’t recover from an insult
## Clinical Frailty Scale

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Fit</td>
<td>People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.</td>
</tr>
<tr>
<td>2 Well</td>
<td>People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.</td>
</tr>
<tr>
<td>3 Managing Well</td>
<td>People whose medical problems are well controlled, but are not regularly active beyond routine walking.</td>
</tr>
<tr>
<td>4 Vulnerable</td>
<td>While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up”, and/or being tired during the day.</td>
</tr>
<tr>
<td>5 Mildly Frail</td>
<td>These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.</td>
</tr>
<tr>
<td>6 Moderately Frail</td>
<td>People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.</td>
</tr>
<tr>
<td>7 Severely Frail</td>
<td>Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).</td>
</tr>
<tr>
<td>8 Very Severely Frail</td>
<td>Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.</td>
</tr>
<tr>
<td>9 Terminally Ill</td>
<td>Approaching the end of life. This category applies to people with a life expectancy &lt;6 months, who are not otherwise evidently frail.</td>
</tr>
</tbody>
</table>

**Scoring frailty in people with dementia**

The degree of frailty corresponds to the degree of dementia. Common symptoms in mild dementia include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In moderate dementia, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In severe dementia, they cannot do personal care without help.
Walter LC, Covinsky KE. Cancer screening in elderly patients: a framework for individualized decision making. JAMA 2001
Figure 21: Stratified outcomes for people diagnosed with cancer
Changes in cancer related mortality

Figure 4: Change in mortality trends (age specific, age standardised), all cancers combined (C00-C97), by age group, England 1971-2012

Percentage of NHS treated patients receiving major surgery by cancer type and age group
Benefits of treatment

TREATMENT

TOXICITY

CURE

SYMPTOM

CONTROL

REDUCTION IN

RECURRANCE
What is the evidence?

• 6% of research studies looked specifically at this age group (12% those enrolled overall)
Cancer MDT meetings

BENEFITS

All patients discussed
Cancer MDT meetings

BENEFITS
All patients discussed

DISADVANTAGES
No one really knows the patient
‘Stage the patient’

• ‘Personalised cancer medicine’ and whole genome sequencing

• Increasing numbers of investigations

• Cost of performing an assessment of the patient – less than the cost of a chest XR
CGA/frailty screening
CGA/frailty screening
Comprehensive geriatric assessment

- Functional status
- Comorbid medical conditions
- Cognitive status
- Psychological state
- Social support
- Nutritional status
- Medications review
- Physical performance
Screening tools

- G8 screening tool
- CRANE tool developed by Macmillan ERG
# Predicting chemotherapy toxicity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value/Response</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of patient</td>
<td>≥ 72 years</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>&lt; 72 years</td>
<td>0</td>
</tr>
<tr>
<td>Cancer type</td>
<td>GI or GU cancer</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Other cancer types</td>
<td>0</td>
</tr>
<tr>
<td>Planned chemotherapy dose</td>
<td>Standard dose</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Dose reduced upfront</td>
<td>0</td>
</tr>
<tr>
<td>Planned No. of chemotherapy drugs</td>
<td>Polychemotherapy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Monochemotherapy</td>
<td>0</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>&lt; 11 g/dL (male), &lt; 10 g/dL (female)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>≥ 11 g/dL (male), ≥ 10 g/dL (female)</td>
<td>0</td>
</tr>
<tr>
<td>Creatinine clearance (Jeliffe, ideal weight)</td>
<td>&lt; 34 mL/min</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>≥ 34 mL/min</td>
<td>0</td>
</tr>
<tr>
<td>How is your hearing (with a hearing aid, if needed)?</td>
<td>Fair, poor, or totally deaf</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Excellent or good</td>
<td>0</td>
</tr>
<tr>
<td>No. of falls in the past 6 months</td>
<td>≥ 1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>0</td>
</tr>
<tr>
<td>Can you take your own medicine?</td>
<td>With some help/unable</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Without help</td>
<td>0</td>
</tr>
<tr>
<td>Does your health limit you in walking one block?</td>
<td>Somewhat limited/limited a lot</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Not limited at all</td>
<td>0</td>
</tr>
<tr>
<td>During the past 4 weeks, how much of the time has your</td>
<td>Limited some of the time, most of the time</td>
<td>1</td>
</tr>
<tr>
<td>physical health or emotional problems interfered with</td>
<td>limited none of the time or a little of the time</td>
<td>0</td>
</tr>
<tr>
<td>your social activities (like visiting with friends, relatives, etc)?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE. See Hurria et al.²
Abbreviation: GI, gastrointestinal; GU, genitourinary.
Predicting chemotherapy toxicity
Predicting radiotherapy toxicity

• More difficult
• Need a model that also includes details of the radiotherapy treatment
ESOGIA study

- Older patients with lung cancer

- PS + age vs CGA selected treatment

- Median OS 6 months (but 23% patients didn’t have chemo in CGA group)
Cognitive impairment

• Often missed – no routine screening

• Risk of both over/under treatment

• May impact on patient’s ability to undergo treatment
Better treatment

• Different chemotherapy regimes – FOCUS 2 study

• Immunotherapy ??

• Radiotherapy techniques – and omitting radiotherapy
SABR

Treatment for early stage peripheral lung cancer

Arms above head for 30-45 mins
1-8 treatments
Excellent local control and overall survival
Reduced toxicity
CGA +

- CGA – includes building a problem list and making interventions

- Treatment decisions change in around 25-40% of chases

- Around 70% of patients have at least one issue highlighted
CGA improves outcomes

• CGA in hospital reduces risk of death and increases chances of living at home at 1 year

• Orthogeriatrics, surgical liaison services

• Reduce length of stay and cost savings ‘POPs practitioner saved £130,000’
Pre treatment

- Early referrals
- Plan for managing potential problems
- Medical optimisation
Prehabilitation

• Increasingly used in surgery – ‘Surgery school’

• Trying to increase fitness prior to procedure

• 62 day targets – may not be in the best interests of patients
During treatment

• Early access to support/intervention if required

• Supporting exercise

• Meaningful screening
Survivorship

TOXICITY
The difficult questions

• Maximising survival may not be the most important thing for any patient

• Older patients – independence and cognitive ability particularly important
Atul Gwande – severe illness conversation guide

• I’d like to talk about what is ahead with your illness and do some thinking in advance about what is important to you so that I can make sure we provide you with the care you want — is this okay?”

• *Time:* “I *wish* we were not in this situation, but I am *worried* that time may be as short as ___ *(express as a range, e.g. days to weeks, weeks to months, months to a year).*”
Goals

• “What are your most important **goals** if your health situation worsens?”

• “What are your biggest **fears and worries** about the future with your health?”

• “If you become sicker, **how much are you willing to go through** for the possibility of gaining more time?”
Time

• To listen to patients

• To understand what is important for them

• To make sure we tailor their treatment to meet their aims
As an oncologist I’d love to see...

• Greater access to the MDT from the start of patient’s treatment – proactive rather than reactive

• Active input into patient management during treatment – individualised and exercise programs

• Empowering AHPs to help with the difficult discussions – ?patient advocate
Resources

• MD tea podcasts  http://thehearingaidpodcasts.org.uk
• BGS
• SIOG
• Atul Gawande – Being mortal, Reiss lectures
• Twitter  @antheasaif
Questions