Paul Calabresi Lecture

Riccardo A. Audisio, MD, FRCS

Whiston Hospital
University of Liverpool - UK
2003 - Lodovico Balducci
2004 - Rosemary Yancik
2005 - Matti Aapro
2006 - Silvio Monfardini
2007 - Hyman B. Muss
Paul Calabresi (1930-2003)

“The crab is the wrong symbol for cancer. They should have used a chimera, a monster in Greek mythology that has a goat's body, a serpent's tail and a lion's head, and is often shown breathing fire. It is a much fiercer and more dangerous animal than the crab.”
“In order to outwit the beast, physicians will have to be able to vary the antibody formula constantly, as treatment progresses”
Head to Head

Should geriatric medicine remain a specialty?

No

C P Denaro, director, associate professor1,2, A Mudge, staff physician1

1 Internal Medicine and Aged Care, Royal Brisbane and Women’s Hospital, Brisbane 4029, Australia, 2 University of Queensland, Brisbane

Correspondence to: C P Denaro c.denaro@uq.edu.au

The development of geriatric medicine has greatly improved care for older people. Leon Flicker (doi: 10.1136/bmj.39538.481273.AD) believes specialist care remains important for this vulnerable group, but C P Denaro and A Mudge argue that age divisions are no longer relevant.

The first 150 words of the full text of this article appear below.

Our patients have changed. The inverted pyramid is imminent. Every developed country is facing an increase in older patients.1 2 The fastest growth in emergency admission rates is in the oldest age group.2 These changes translate into major changes in the profile of our hospital patients, as older patients with multiple chronic diseases and disabilities occupy more beds. In addition, improved survival is also leading to larger numbers of...
Marjorie W. Warren (1897-1960) surgeon @ West Middlesex Hospital: the “Mother of Geriatrics”

“developed the concept that merely keeping older people fed until they died was not enough - they needed diagnosis, treatment, care & support.”

“rehabilitation is essential to the care of older people”

Warren MW. Care of the chronic aged sick. Lancet 1946;i:841-3.
patients, some of whom had been bedridden, are able to gain some degree of independence with the correct assessment and treatment. A leading consultant in geriatric medicine, Dr. Warren died on September 5 at the age of 62, after a short illness.
She was Deputy Medical Superintendent in 1935 when the Poor Law Infirmary next door was annexed into the West Middlesex Hospital.

She blamed the high number of elderly, bedridden and chronically sick patients she and her team found this was due to:

- poor diagnosis
- insufficient treatment
- absence of medical supervision
- lack of multidisciplinarity & rehabilitation
The essence of geriatric medicine as a specialty is to assess and treat the medical and rehabilitative needs of older people.

This is done through a process known as comprehensive geriatric assessment (CGA).
Comorbidities:

Affect the progression of concurrent disease
Alter treatment efficacy
Predispose toward adverse drug reactions
Decrease QoL

Salvi F JAGS 2008
Comorbidities & Treatment:

Comorbidity & age influence treatment receive

even if age appears to be a stronger predictive factor...

Vulto AJCM Cancer 2006
Comorbidities & prognosis

Read WL. JCO 2004
**CALGB 9670: Barriers to Trials**

<table>
<thead>
<tr>
<th>Variable</th>
<th>&lt;65 yrs</th>
<th>65+ yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offered Trial</td>
<td>51%</td>
<td>35%</td>
</tr>
<tr>
<td>Offered and Accepted</td>
<td>56%</td>
<td>50%</td>
</tr>
</tbody>
</table>

In multivariate analysis **AGE** was the only independent risk factor for offering trial.

Race, co-morbidity, stage, education, marital status, satisfaction with care **NOT** predictive.

*Kemeny et al, J Clin Oncol 2003*
Under-representation of elderly

J. H. STEWART

TABLE 1. Participants in breast, colorectal, lung, or prostate cancer surgical trials of the National Cancer Institute Clinical Trials Cooperative Group, 2000–2002 (n = 13,991)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total no. of participants</th>
<th>Percentage of patients</th>
<th>Proportion of incident cancer patients in US in 2000 (%)</th>
<th>Proportion of US population in 2000 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>12,112</td>
<td>86.57</td>
<td>82.15</td>
<td>73.02</td>
</tr>
<tr>
<td>Hispanic</td>
<td>476</td>
<td>3.40</td>
<td>4.24</td>
<td>10.86</td>
</tr>
<tr>
<td>African-American</td>
<td>1,108</td>
<td>7.92</td>
<td>11.23</td>
<td>11.31</td>
</tr>
<tr>
<td>Asian/Pacific islander</td>
<td>260</td>
<td>1.86</td>
<td>2.16</td>
<td>4.07</td>
</tr>
<tr>
<td>American Indian/Alaskan native</td>
<td>35</td>
<td>0.25</td>
<td>0.22</td>
<td>0.74</td>
</tr>
<tr>
<td>Total</td>
<td>13,991</td>
<td>100</td>
<td>100 (687,183)</td>
<td>100 (201,632,112)</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21–44</td>
<td>2,313</td>
<td>16.53</td>
<td>4.91</td>
<td>50.62</td>
</tr>
<tr>
<td>45–54</td>
<td>3,950</td>
<td>28.23</td>
<td>11.82</td>
<td>19.26</td>
</tr>
<tr>
<td>55–64</td>
<td>3,929</td>
<td>28.08</td>
<td>20.84</td>
<td>12.37</td>
</tr>
<tr>
<td>65–74</td>
<td>2,883</td>
<td>20.61</td>
<td>30.78</td>
<td>9.30</td>
</tr>
<tr>
<td>75+</td>
<td>916</td>
<td>6.55</td>
<td>31.64</td>
<td>8.45</td>
</tr>
<tr>
<td>Total</td>
<td>13,991</td>
<td>100</td>
<td>100 (687,183)</td>
<td>100 (197,552,190)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2,245</td>
<td>16.05</td>
<td>48.97</td>
<td>48.19</td>
</tr>
<tr>
<td>Female</td>
<td>11,746</td>
<td>83.95</td>
<td>51.03</td>
<td>51.81</td>
</tr>
<tr>
<td>Total</td>
<td>13,991</td>
<td>100</td>
<td>100 (687,183)</td>
<td>100 (201,632,112)</td>
</tr>
</tbody>
</table>

Stewart JH Ann Surg Oncol 2007
complications (any & major) by severity of surgery stratified by age group

![Graph showing the percentage of complications by age group and severity of surgery.](image-url)
multivariate analysis
(Cox Regression)

<table>
<thead>
<tr>
<th>Component of PACE</th>
<th>RR*</th>
<th>95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 days Morbidity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BFI mod/severe fatigue (&gt;3)</td>
<td>1.46</td>
<td>1.18-2.13</td>
</tr>
<tr>
<td>IADL dependent (&lt;8)</td>
<td>1.36</td>
<td>1.04-2.05</td>
</tr>
<tr>
<td>Hospital stay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADL dependent (&gt;0)</td>
<td>2.00</td>
<td>1.37-2.92</td>
</tr>
</tbody>
</table>
PACE: probability of complications and n. deranged components
Prospective series of consenting (MMS ≥18) elderly (≥70 yrs) surgical cancer patients

**Functional Health Status**
- Performance Status (PS)
- Mini mental State (MMS)
- Brief Fatigue Inventory (BFI)
- Activities of Daily Living (ADL)
- Geriatric Depression Scale (GDS)
- Instrumental activities of daily living (IADL)

**Quick tools**
- VES-13
- GFI
- “up & go”

**End Points**
- 30-day mortality & morbidity
- n. of specialists involved
Deutsche Krebshilfe
Call for proposals
budget: 5 million Euros

21 proposals received

8 proposals shortlisted and funded
Institut National du Cancer
Mission Oncogeriatrique:

12 proposals received

2 million Euros in 2yrs for 3 yrs

15 Unites Pilotes Coordination OG
An update from the UK

looking closer....
The Cancer Reform Strategy

Prof. Mike Richards
December 2007

Setting the program for next 4 years
diagnosing cancer earlier (Chapter 3)

• Rationale: Late diagnosis is the major factor underlying poor survival rates in the UK

• Actions:
  - Extending breast screening (65-73 years) with digital mammography
  - Extending bowel screening (70-75 years)
  - Improving efficiency of cervical screening
  - National Awareness and Early Diagnosis Initiative (NAEDI)
    o Promoting early presentation by patients
    o Reducing delays in primary care (primary care audit of new cancers)
reducing cancer inequalities
(Chapter 6)

- Rationale: There are major inequalities in cancer incidence, uptake of services and/or outcomes according to age.

- Actions
  - National Cancer Equality Initiative to
    o Optimise data collection on inequalities
    o Enhance understanding of inequalities
    o Promote research
    o Spread good practice
  - Local goals to be set for mortality reductions by 2012
National Cancer Equalities Initiative

- Identify best practice
- Share best practice
- Understand how programmes can be replicated across England
- Identify gaps
National Cancer Equalities Initiative

To advise the National Cancer Director and Ministers on the delivery of the actions to reduce inequalities set out in the Cancer Reform Strategy by:
National Cancer Intelligence Network

• to bring together datasets to provide high quality cancer intelligence on a national scale

• to provide a new resource for epidemiological research

• to ensure optimal use of data currently collected

• to identify and eliminate duplication of effort
Cancer in the Elderly is on the agenda
Dissecting retrospective national data
Prospective data capture of COMORBIDITIES nationwide
The Glenfield Hospital
oncogeriatric surgical assessment

Geriatric Assessment
Comorbidities: Charlson index
Functional Assessment: Barthel & IADL
Multidimensional Assessment: MMS & GDS
Anaesthesiological Assessment
Surgical Assessment: MDT
The Glenfield Hospital
oncogeriatric surgical assessment

Frailty over-estimated
Life-expectancy under-estimated

Complexity of communication
Age is associated with morbidity: wound infection; renal failure; cardiovascular; respiratory; mortality

Several risk factors for postoperative morbidity & mortality increase with age

Increasing age itself remains an important risk factor for postoperative morbidity and mortality.
The preoperative evaluation of the geriatric patient is typically more complex than that of the younger patient:

- heterogeneity of patient group
- greater number & complexity of comorbid conditions that usually accumulate with age
Postoperative Delirium

Acute & fluctuating decline in attention & cognition

Common (25-60%) & serious on surgical wards

Increased risk of complications & death

Idiopatic, but age-related

Positive effect of high standard delirium care => 50% reduction
Surgery & Elderly Patients

Ti

Anecdotal observations
Small series - Highly biased

Prospective data collection
CGA adopted into RCTs

Examples of “good practice”
Surgery & Elderly Patients

Time is running out!

Multi-disciplinarity

Multi-nationality

Patient centred care

Political change to make an impact