Assessment of the Older Cancer Patient

Melissa J. Cohen, M.D
Geriatric Oncology Fellow
UCLA David Geffen School of Medicine
What is Geriatric Oncology?

- Oncologists implementing geriatric principles to manage older patients with cancer
“Silver Tsunami”

- by the year 2030, 1 of every 5 Americans will be > 65 yrs
- >80 yrs is the fastest growing segment of our population
- incidence and mortality of / from cancer increases with age
  - 60% of all cancer diagnoses and 70% of cancer mortality occurs in persons aged 65 years and older
## Perspective of age

<table>
<thead>
<tr>
<th>Young adults</th>
<th>Older adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>• single serious condition</td>
<td>• coexists w/ multiple illnesses and significant disability</td>
</tr>
<tr>
<td>• dominates the clinical picture</td>
<td>• other morbid conditions may be beyond cancer</td>
</tr>
<tr>
<td>• tolerates acute, severe side effects relatively well</td>
<td>• variable tolerability of specific tx, may need tailoring</td>
</tr>
<tr>
<td>• main goal: survival/cure</td>
<td>• main goal: survival vs QOL</td>
</tr>
</tbody>
</table>
Goals of cancer treatment in the older patient

- cure
- prolongation of survival
- prolongation of active life expectancy
- effective symptom management
- to “do no harm”
Important Questions in Geriatric Oncology

- Is the patient going to die of, or with cancer?
- Is the patient going to live long enough to suffer the consequences of cancer?
- Is the patient able to tolerate treatment?
- Are there complications of treatment that are more common in older individuals?
- Is the social network of the patient adequate to support him/her during treatment?
Important Questions in Geriatric Oncology

- Is the patient going to die of, or with cancer?
- Is the patient going to live long enough to suffer the consequences of cancer?
- **Is the patient able to tolerate treatment?**
- Are there complications of treatment that are more common in older individuals?
- Is the social network of the patient adequate to support him/her during treatment?
Is the patient able to tolerate treatment?

- Decision routinely made based upon chronological age.
- *Chronological age ≠ Physiologic age.*
Heterogeneity of Aging
Life expectancy in women

Risk of Dying of Cancer in Remaining Lifetime for Patients at Average Risk (%age)

<table>
<thead>
<tr>
<th>Type of Cancer</th>
<th>75 yo</th>
<th>80 yo</th>
<th>85 yo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>2.8</td>
<td>1.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Colon</td>
<td>3.3</td>
<td>1.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Cervical</td>
<td>0.19</td>
<td>0.12</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Adapted from Walter LC, Covinsky KE. JAMA. 2001; 285 (21):2752
How do Oncologists do this?

- History and Physical Exam
- Karnofsky Performance Status
- Eastern Cooperative Oncology Group (ECOG) Performance Status
- Educated guess
How do Oncologists do this?

- History and Physical Exam
- Karnofsky Performance Scale
- Eastern Cooperative Oncology Group (ECOG) Performance Status
- Educated guess

- limited to physical functioning
- not sensitive to functional declines of aging
- NOT validated in the geriatric population
<table>
<thead>
<tr>
<th>Grade</th>
<th>ECOG</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Fully active, able to carry on all pre-disease performance without restriction.</td>
</tr>
<tr>
<td>1</td>
<td>Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work.</td>
</tr>
<tr>
<td>2</td>
<td>Capable of only limited self-care, confined to bed or chair more than 50% of waking hours.</td>
</tr>
<tr>
<td>3</td>
<td>Capable of only limited self-care, confined to bed or chair more than 50% of waking hours.</td>
</tr>
<tr>
<td>4</td>
<td>Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair.</td>
</tr>
<tr>
<td>5</td>
<td>Dead</td>
</tr>
</tbody>
</table>

ECOG PS in the elderly

- 80 yo woman w/ breast cancer has a sedentary lifestyle. She is able to do some light housework but has a housekeeper who does most of the heavy duty washing and cleaning. She takes a long nap after lunch most days since she was 70. She goes out daily to the grocery store at the corner of the next block to do her shopping. Once a week a friend drives her to bridge club.

- ECOG PS: 0, 1 or 2?
How do Geriatricians do this?

- Comprehensive Geriatric Assessment (CGA)
  - Functional status
  - Comorbid medical conditions
  - Concomitant medications
  - Cognitive function
  - Psychological state
  - Social support
How do Geriatricians do this?

- Comprehensive Geriatric Assessment (CGA)
  - Functional status
  - Comorbid medical conditions
  - Concomitant medications
  - Cognitive function
  - Psychological state
  - Social support

✓ time consuming (60-90 min)
✓ multidisciplinary
Research opportunity

- **Assessments using CGA**
  - Predicts morbidity and mortality in cancer patients\(^1\)
  - Identifies needs and clinical problems\(^2\)
  - No data yet that it improves outcome

- **Not practical in the busy oncology clinic**
  - Time consuming
  - Lack skills/tools

- **Newer versions**
  - Abbreviated forms of CGA (“mini-CGA”)\(^1,3\)
  - Self-administered CGA\(^4,5\)
Assessment and stratification of the older cancer patient

- a.k.a. who shouldn’t you treat?
  - Which variables are important?
    - Age?
    - Functional status?
    - Comorbid medical conditions?
    - Cognitive function?
    - Psychological state?
    - Social support?
I. Review of the literature

- ECOG and age were poor proxies for fnl status\(^1\)
- dependence >1 ADL associated with ↑ risk of mortality and chemotherapy-induced toxicity.\(^2\)
- comorbidity is associated with ↓ life expectancy and ↑ treatment complications.\(^3\)
- VES-13 predicts death and fnl decline in vulnerable older people\(^4\)
- VES-13 detected geriatric impairment in older pts w/ Prostate Cancer (similar to CGA)\(^5\)

---

3) Extermann M. Cancer Control 2007;14:13-22
II. Secondary data analysis

A) Goals
   - identify the most important predictors of survival in older cancer patients

B) Available data sets
   - VA Data set with Dr. Dhanani
   - Longitudinal Studies On Aging II (LSOA II)
   - Health and Retirement Study (HRS)
Existing Tools

- Vulnerable Elders Survey-13
- Mini CGA’s (self administered)
- Comorbidity scales (CCI/CIRS-G)
- Performance measures (ADL’s/IADL’s)
- Balducci frailty criteria
- NIA tool
III. Pilot study at UCLA

- select/create a tool based upon I. and II.
- determine feasibility and preliminary intermediate outcomes
- UCLA affiliated clinics
  - Boyer, 100 Med Plaza, Santa Clarita, Pasadena, Santa Monica, Westlake
Intermediate Outcomes

- Surrogate endpoint: Does the patient make it to 1st re-staging CT or PET (2-3 months)
IV. Validation Study (TORI network)

- 25+ group of community oncology practices
- Largely in California, but also sites across U.S.A
- Research infrastructure already in place

Development of a quick self-assessment tool that can be used by a busy oncologist to identify metastatic cancer patients who would be least likely to benefit from chemotherapy.
Thank you.
VES-13

- Age 1pt for 75-84, 3 pts >85
- Self-rated health 1pt for poor or fair
- Difficulty w/ activities (graded)
  - Stooping, lifting, reaching, writing, walking 1/2 mile, heavy housework
  - 1 pt for a lot of difficulty or unable (max 2)
  - Difficulty shopping, managing money, walking across room, light housework, bathing
  - Score ≥3 is considered vulnerable

Self-administered CGA
CCI / CIRS-G

- A score for evaluating 10 year survival based upon age and # of comorbid conditions
- Not graded by severity

- Classifies comorbidities by organ systems and grades each condition from 0 (no problems) to 4 (several incapacitating or life-threatening conditions)
ADL’s/IADL’s

- Bathing
- Dressing
- Toileting
- Feeding
- Transferring
- Continence
- Telephone
- Shopping
- Food preparation
- Housekeeping
- Laundry
- Transportation
- Medications
- Finances

Katz (1963) JAMA 185:914
Balducci Frailty Criteria

- Age >85