Unmet Clinical Needs in the Elderly

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Bladder Cancer

- a disease of the elderly
Silver Tsunami
Historical and Projected U.S. Population

- **45 - 64 yrs CAGR = 0.8%**
- **65 - 84 yrs CAGR = 1.5%**
- **85+ yrs CAGR = 3.2%**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>45 - 64 yrs</th>
<th>65 - 84 yrs</th>
<th>85+ yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>97.5</td>
<td>30.8</td>
<td>62.4</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>121.3</td>
<td>34.1</td>
<td>81.0</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>138.3</td>
<td>47.4</td>
<td>83.7</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>153.7</td>
<td>61.9</td>
<td>82.3</td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td>168.7</td>
<td>64.6</td>
<td>88.6</td>
<td></td>
</tr>
<tr>
<td>2050</td>
<td>179.8</td>
<td>65.8</td>
<td>93.1</td>
<td></td>
</tr>
</tbody>
</table>
Baby Boomers

DID YOU HEAR SOMETHING?

Elder Care Trailer Park

Nursing Homes

Caregivers

Senior Social Services
Optimal therapy?
Guidelines

- recommend radical cystectomy as the primary treatment for patients with muscle-invasive bladder cancer (± neoadjuvant chemotherapy)

- trimodal therapy or partial cystectomy in appropriate cases

- alternative treatments reserved for patients with “extensive comorbid disease” or “poor performance status”
  - TURBT alone
  - XRT alone
  - chemo alone
combined SEER–Medicare dataset (patients > 65 yrs)

stage 2 MIBC with no regional or distant metastases

diagnosed from Jan 1, 1992, through Dec 31, 2002

n=3262
Radical Cystectomy

- 21% (n=678) underwent radical cystectomy

- Older age at diagnosis and higher comorbidity were associated with decreased odds of receiving cystectomy
  - ≥80 yrs. vs. 66–69 yrs., OR = 0.10
  - Charlson comorbidity index 3 vs. 0–1*, OR = 0.25

- Long travel distance was associated with decreased odds of receiving cystectomy
  - >50 vs. 0–4 miles, OR = 0.60, 95% CI = 0.37 to 0.98

- Cystectomy more common in more populous/urban regions of SEER

*CCI 0-1 in 85% of patients
CCI 3 in only 6% of patients
Platinum Priority – Bladder Cancer

Use of Potentially Curative Therapies for Muscle-invasive Bladder Cancer in the United States: Results from the National Cancer Data Base

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Curative Therapy

- National Cancer Data Base
- treatment for MIBC between Jan 2004, and Dec 2008
- 28,691 patients with MIBC (stages II–IV)
  - excluding those with cT4b tumors or distant metastases.
  - treatments included radical or partial cystectomy with or without chemotherapy (CT), chemoradiotherapy (CRT), radiation therapy (RT), or CT alone and observation following biopsy
- Aggressive therapy (AT) was defined as radical or partial cystectomy or definitive RT/CRT (total dose 50 Gy)
<table>
<thead>
<tr>
<th>Treatment type</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radical cystectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Without chemotherapy</td>
<td>8232</td>
<td>28.7</td>
</tr>
<tr>
<td>With neoadjuvant chemotherapy</td>
<td>530</td>
<td>1.9</td>
</tr>
<tr>
<td>With adjuvant chemotherapy</td>
<td>3064</td>
<td>10.7</td>
</tr>
<tr>
<td>Partial cystectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Without chemotherapy</td>
<td>796</td>
<td>2.8</td>
</tr>
<tr>
<td>With neoadjuvant chemotherapy</td>
<td>37</td>
<td>0.1</td>
</tr>
<tr>
<td>With adjuvant chemotherapy</td>
<td>234</td>
<td>0.8</td>
</tr>
<tr>
<td>Radiotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definitive with chemotherapy</td>
<td>1528</td>
<td>5.3</td>
</tr>
<tr>
<td>Definitive without chemotherapy</td>
<td>646</td>
<td>2.3</td>
</tr>
<tr>
<td>Palliative</td>
<td>422</td>
<td>1.5</td>
</tr>
<tr>
<td>Chemotherapy (with or without palliative radiotherapy)</td>
<td>2868</td>
<td>10.0</td>
</tr>
<tr>
<td>Observation</td>
<td>7432</td>
<td>25.9</td>
</tr>
<tr>
<td>Missing</td>
<td>2902</td>
<td>10.1</td>
</tr>
<tr>
<td>Aggressive therapy(^{a})</td>
<td>15067</td>
<td>52.5</td>
</tr>
<tr>
<td>Nonaggressive therapy</td>
<td>10722</td>
<td>37.4</td>
</tr>
<tr>
<td>Total</td>
<td>28691</td>
<td></td>
</tr>
</tbody>
</table>

\(^{a}\) Surgical resection or any radiotherapy-based regimen with a total dose \(\geq 50\) Gy.
Predicting aggressive therapy

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. (%)</th>
<th>OR(^a)</th>
<th>95% CI</th>
<th>p value(^b)</th>
</tr>
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<tbody>
<tr>
<td>Age group, yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤50</td>
<td>1572 (6.1)</td>
<td>1</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>51–60</td>
<td>3998 (15.5)</td>
<td>0.92</td>
<td>0.80–1.05</td>
<td>0.23</td>
</tr>
<tr>
<td>61–70</td>
<td>6565 (25.5)</td>
<td>0.88</td>
<td>0.77–1.01</td>
<td>0.06</td>
</tr>
<tr>
<td>71–80</td>
<td>7713 (29.9)</td>
<td>0.68</td>
<td>0.59–0.79</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>81–90</td>
<td>5195 (20.1)</td>
<td>0.34</td>
<td>0.29–0.40</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>&gt;90</td>
<td>746 (2.9)</td>
<td>0.12</td>
<td>0.09–0.15</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Other predictive factors: race, insurance, facility volume, facility type, hydronephrosis, TNM stage, non-urothelial histology
What is going on?
Treatment obstacles

- Failure of databases?
- Failure of providers to deliver care according to guidelines?
- Financial disincentives?
- Regionalization of care – patient access
- Patient choice? Quality over quantity of life.
- Many patients too old/frail/sick???
How do we get the focus back on us?

Post this on Twitter...

=CICK
Focus on the elderly

- “comprehensive geriatric assessment (CGA)"
  - e.g. mini-mental status, depression, nutrition
  - functional vs. chronologic age

- multidisciplinary care
  - expanding proportion of patients receiving curative therapy by wider adoption of trimodal therapy?

- better representation in clinical trials
Management of elderly patients with NSCLC; updated expert’s opinion paper: EORTC Elderly Task Force, Lung Cancer Group and International Society for Geriatric Oncology

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1Medical Department, European Organization for Research and Treatment of Cancer, Brussels, Belgium; 2Division of Medical Oncology, “S.G. Moscati” Hospital-Avellino, Avellino, Italy; 3Department of Internal Medicine II, Jena University Hospital, Jena, Germany; 4The Christie NHS Foundation Trust, Manchester, UK; 5Lung Cancer Early Detection Unit, Division of Thoracic Surgery, European Institute of Oncology, Milano, Italy; 6Brigham and Women’s Hospital, Harvard Medical School, Boston, USA; 7Department of Medical Oncology, S. Paolo Hospital, Milan, Italy; 8The Royal Marsden NHS Foundation, Surrey, UK
Consensus Early Stage NSCLC

Surgical treatment should not be denied to elderly patients just on the basis of chronological age.
The medical treatment of metastatic renal cell cancer in the elderly: Position paper of a SIOG Taskforce

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b Centre Léon Bérard, Université de Lyon, Lyon, France
c Institut Gustave Roussy, Villejuif, France
d Institut Jules Bordet, Université Libre de Bruxelles, Brussels, Belgium
e Clinique de Genolier, Genolier, Switzerland

Accepted 15 August 2008
Background for the proposal of SIOG guidelines for the management of prostate cancer in senior adults

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Summary

- bladder cancer is primarily a disease in the elderly
  - fast growing segment of the population

- about half patients with muscle invasive bladder cancer do not undergo radical therapy
  - this number increases with age

- most elderly patients should be eligible for radical cystectomy and/or trimodal therapy with acceptable outcomes

- presence of comorbidities and functional status may be more important factors than chronological age when determining optimal treatment strategies for elderly patient
  - comprehensive geriatric assessment is a key component