Geriatric Assessment In Oncology

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Overview

1. Background and context
2. What is CGA?
3. Why is it important in cancer care?
4. How to implement GA in clinical practice
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Short History of Cancer Treatment in Older Patients

1983
Dr BJ Kennedy encouraged the study of ageing and cancer during the Presidential Address at ASCO 1988

1988
The Venice statement. Cancer in the elderly: why treated so badly?

1990
First edition of Comprehensive Geriatric Oncology released

1998
International Society of Geriatric Oncology (SIOG) formed

2000
First oncogeriatric guidelines published on the use of hematopoietic growth factors in elderly patients receiving cytotoxic chemotherapy

2002
US Geriatric Oncology Consortium founded to initiate trials and raise awareness of problems of elderly patients

2003
CGA guidelines assessed by the SIOG

2005
NCCN guidelines published practice guidelines for senior adult oncology

2006
Onwards

Source: Matti Aapro
How to Implement Geriatric Oncology in Daily Practice

“If you’re not a paediatric oncologist, you’re a geriatric oncologist”

(Unknown Source)
Define Old Age

65? 70?
## Romania: Demographic Changes

### Table no. 1 Age distribution of the world, European and Romanian population

<table>
<thead>
<tr>
<th></th>
<th>1960</th>
<th>1980</th>
<th>2000</th>
<th>2020</th>
<th>2050</th>
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<tbody>
<tr>
<td>World</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14 age</td>
<td>36.84</td>
<td>35.14</td>
<td>30.04</td>
<td>25.11</td>
<td>20.19</td>
</tr>
<tr>
<td>15 - 59 age</td>
<td>55.0</td>
<td>56.3</td>
<td>60.0</td>
<td>61.3</td>
<td>58.1</td>
</tr>
<tr>
<td>&gt; 60 age</td>
<td>8.14</td>
<td>8.61</td>
<td>10.01</td>
<td>13.61</td>
<td>21.68</td>
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<tr>
<td>EUROPE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14 age</td>
<td>26.71</td>
<td>22.18</td>
<td>17.53</td>
<td>15.02</td>
<td>15.02</td>
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<tr>
<td>15 - 59 age</td>
<td>60.2</td>
<td>61.8</td>
<td>62.2</td>
<td>59.1</td>
<td>50.5</td>
</tr>
<tr>
<td>&gt; 60 age</td>
<td>13.1</td>
<td>16.04</td>
<td>20.28</td>
<td>25.87</td>
<td>34.5</td>
</tr>
<tr>
<td>ROMANIA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14 age</td>
<td>28.18</td>
<td>26.67</td>
<td>18.29</td>
<td>14.01</td>
<td>13.38</td>
</tr>
<tr>
<td>15 - 59 age</td>
<td>61.2</td>
<td>60.1</td>
<td>62.6</td>
<td>62.4</td>
<td>49.1</td>
</tr>
<tr>
<td>&gt; 60 age</td>
<td>10.6</td>
<td>13.26</td>
<td>19.07</td>
<td>23.56</td>
<td>37.57</td>
</tr>
</tbody>
</table>

Source: ONU – World Population Prospects 2012,
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What is CGA?

“multidimensional interdisciplinary diagnostic process focused on determining a (frail) older person’s medical, psychological and functional capability in order to develop a coordinated and integrated plan for treatment and long term follow up.”

Abbreviated to GA @ SIOG

What is CGA?

- Nutrition
- Social support
- Polypharmacy
- Geriatric Syndromes
- Psychological Status
- Functional Status
- Comorbidity
- Cognition
- Others?
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Why Comprehensive Geriatric Assessment?

- Improved outcomes for older patients (Stuck et al., 1993, Ellis et al., 2011)
- Variable influence on treatment decisions (Barethelemy et al., 2011, Caillet et al., 2011, Chaibi et al., 2011, Decoster et al., 2013, Extermann et al., 2008, Puts, 2012, Horgan et al., 2012, Kenis et al., 2013)
- No consensus re: GA assessment and interventions and impact on oncology related endpoints (Puts et al., 2012)
Why Do We Need Geriatric Assessment?

- To assess patients’ physiologic reserve
- Estimate life expectancy
- Stratify patients according to their ability to tolerate cancer treatment
- Identify undiagnosed conditions that may influence patient toxicity/outcomes
- Refer patients for supportive care/potential reversal of problems
- Common language for classification of older patients’ health
- Optimal use of healthcare resources
Rationale for GA

“Staging the Aging”

<table>
<thead>
<tr>
<th>Stage</th>
<th>Proposed Definition*</th>
</tr>
</thead>
</table>
| Fit      | • No functional dependence in ADL and IADLs  
          | • No comorbidities  
          | • No geriatric syndromes |
| Vulnerable | • Dependence in one or more IADLs but not ADLs  
          | • Comorbidities present but not severe or life threatening  
          | • May have mild memory disorder and/or mild depression but no other significant geriatric syndromes |
| Frail    | • Age ≥ 85 years  
          | • Dependence in one or more ADLs  
          | • Any significant geriatric syndrome  
          | • 3 or more grade 3 comorbidities or any grade 4 comorbidity (with limitation of daily life) |

Is Performance Status Enough?

Comprehensive Geriatric Assessment Adds Information to Eastern Cooperative Oncology Group Performance Status in Elderly Cancer Patients: An Italian Group for Geriatric Oncology Study

Lazzaro Repetto, Lucia Fratino, Riccardo A. Audisio, Antonella Venturino, Walter Gianni, Marina Vercelli, Stefano Parodi, Denise Dal Lago, Flora Gioia, Silvio Monfardini, Matti S. Aapro, Diego Serraino and Vittorina Zagonel
The Number of Comorbidities Increases with Age

- Important consideration in determining life expectancy
- Patients with comorbidities traditionally excluded from trials

Importance of GA

Fig 1. Proportion of older survivors of breast cancer (N = 860) with poor treatment tolerance and mortality within each group of geriatric assessment domain deficits (1997 to 2006; Cochran-Armitage test for trend, P < .0001 for poor treatment tolerance and mortality).

age (hazard ratio [HR], 1.04; 95% CI, 1.01 to 1.07), abnormal albumin level (HR, 1.97; 95% CI, 1.23 to 3.15), poor Eastern Cooperative Oncology Group performance status ($\geq 2 \vee < 2$: HR, 1.77; 95% CI, 1.15 to 2.72), abnormal geriatric depression scale status (HR, 1.81; 95% CI, 1.29 to 2.56), high malnutrition risk (high $\vee$ low risk: HR, 1.84; 95% CI, 1.17 to 2.87), and advanced disease stage (late $\vee$ early: HR, 1.71; 95% CI, 0.98 to 2.95) were independent predictors of survival.
Why is Social Support Important?

The present meta-analysis showed that the longevity of cancer patients is related to their perceptions of social support, the size of their social networks, and their marital status.
But it’s not all doom and gloom......

How others see you, is not important...
How you see yourself means everything.
Fig. 2  Survival in months cases versus controls.

Claire Robb, David Boulware, Janine Overcash, Martine Extermann

Patterns of care and survival in cancer patients with cognitive impairment

Critical Reviews in Oncology/Hematology Volume 74, Issue 3 2010 218 - 224

http://dx.doi.org/10.1016/j.critrevonc.2009.07.002
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### Use of Geriatric Assessment for Older Adults in the Oncology Setting: A Systematic Review

<table>
<thead>
<tr>
<th>Domain</th>
<th>No. of studies that included the domain</th>
<th>The most frequent questionnaire or instrument to assess the domain*</th>
<th>Frequency of use¹, No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities of daily living</td>
<td>68</td>
<td>Katz index</td>
<td>38 (56)</td>
</tr>
<tr>
<td>Instrumental activities of daily living</td>
<td>65</td>
<td>Lawton scale</td>
<td>40 (52)</td>
</tr>
<tr>
<td>Comorbidity</td>
<td>58</td>
<td>Charlson comorbidity index; Cumulative Illness Rating Scale (including Cumulative Illness Rating Scale, Mortality)</td>
<td>20 (34)</td>
</tr>
<tr>
<td>Cognitive functioning</td>
<td>53</td>
<td>Mini Mental State Examination</td>
<td>41 (77)</td>
</tr>
<tr>
<td>Depression</td>
<td>52</td>
<td>Geriatric Depression Scale (any version)</td>
<td>35 (57)</td>
</tr>
<tr>
<td>Nutritional assessment</td>
<td>40</td>
<td>Mini Nutritional Assessment (including short form); Body mass index</td>
<td>16 (40)</td>
</tr>
<tr>
<td>Performance status</td>
<td>37</td>
<td>Eastern Oncology Collaborative Group scale; Karnofsky scale</td>
<td>20 (54)</td>
</tr>
<tr>
<td>Fall risk assessment</td>
<td>27</td>
<td>Self-reported falls</td>
<td>14 (52)</td>
</tr>
</tbody>
</table>

*Both instruments were used in more than 20% of the studies.

¹Among studies that included the domain.

Expert consensus panel guidelines on geriatric assessment in oncology

A. O’DONOVAN, BSc, ASSISTANT PROFESSOR, Applied Radiation Therapy Trinity (ARTT), Trinity College Dublin, Ireland, S.G. MOHILE, MD, MS, ASSOCIATE PROFESSOR, James Wilmot Cancer Center, University of Rochester, Rochester, NY, USA & M. LEECH, MSc, ASSOCIATE PROFESSOR, Applied Radiation Therapy Trinity (ARTT), Trinity College Dublin, Ireland

O’DONOVAN A., MOHILE S.G. & LEECH M. [2015] European Journal of Cancer Care
Expert consensus panel guidelines on geriatric assessment in oncology

Despite consensus guidelines on best practice in the care of older patients with cancer, geriatric assessment (GA) has yet to be optimally integrated into the field of oncology in most countries. There is a relative lack of consensus in the published literature as to the best approach to take, and there is a degree of uncertainty as to how integration of geriatric medicine principles might optimally predict patient outcomes. The aim of the current study was to obtain consensus on GA in oncology to inform the implementation of a geriatric oncology programme. A four-round Delphi process was employed. The Delphi method is a structured group facilitation process, using multiple iterations to gain consensus on a given topic. Consensus was reached on the optimal assessment method and interventions required for the commonly employed domains of GA. Other aspects of GA, such as screening methods and age cut-off for assessment, represented a higher degree of disagreement. The expert panel employed in this study clearly identified the criteria that should be included in a clinical geriatric oncology programme. In the absence of evidence-based guidelines, this may prove useful in the care of older cancer patients.

Keywords: management, older person, oncological outcome, supportive care.

Geriatric Assessment

- MMSE
- Nutrition
- Patient/carer interview
- Social support
- No consensus
- Polypharmacy
- GDS
- Psychological Status
- Comorbidity
- Charlson
- Cognition
- MNA
- Functional Status
- ADLs, IADLs, TUG
- Screening?
Interested in Implementing GA in Your Clinic......

Training

• Site visits

• Geriatric Medicine

• Become a National Representative (SIOG)

• SIOG annual conference

• JGO (niche journal)  www.siog.org

• CME events
Why Do We Need GA in Oncology?????
Mulțumesc!
15th SIOG Conference - Prague, Czech Republic

SAVE THE DATE - 12 to 14 November 2015
Abstract submission deadline: 09 June 2015
www.siog.org