Approach to dementia – patients with breast cancer

Siri Rostoft, MD, PhD
Oslo University Hospital
University of Oslo, Norway
Frailty and Cancer Research Group
srostoft@gmail.com
Disclosures

None declared
Dementia is a **progressive** illness, for which there is **no treatment**, and that **leads to death**.

Mitchell NEJM 2015
Case – woman with breast cancer

• 69 years old, home dwelling
• Diagnosed inoperable locally advanced breast cancer
• Admitted in hospital for neoadjuvant chemotherapy

• After a week non-cooperative, pulled out i.v. lines, completely bed-ridden, aggressive
• Why did she develop delirium?
• How was her premorbid cognitive function?
OUTLINE

• What is cognitive impairment/dementia?

• Cancer and dementia

• Causes of dementia

• What to do in clinical practice?
Clinical warning signs

• The wife/children answer all the questions
• The patient is not sure why he/she ended up in your office
• The patient keeps asking the same questions
• You get a feeling that your information does not get through

• The grandchildren are no longer allowed in the car when grandfather drives
What is cognitive impairment?

- Cognition: Umbrella term for memory, language, executive function and orientation
- Dementia: Most advanced stage of cognitive impairment
- In dementia: Individual variability decreases
- People 85+: Prevalence reaches 30%
Cancer and dementia

• Cancer and cognitive impairment frequently co-exist in older age

• Burden of cancer and cancer treatment can lead to impairment in cognition

• Risk of confusion or delirium
Mild cognitive impairment and cancer treatment

• Everyday life: does not cause practical problems

• Cancer: Beware if treatment decisions are complicated – for example risk versus benefit of adjuvant chemotherapy

• May need follow-up if risk of side effects of treatment (febrile neutropenia)
Stages of dementia and cancer treatment

- **Mild dementia:** Loss of intellectual abilities interferes with social or occupational functioning
  - Needs help with cooking, using a computer
  - May need help explaining treatment options

- **Moderate or severe dementia:**
  - Patient generally not able to understand important information or make proper decisions – involve caregivers
  - Patient should be involved to the extent possible
Causes of dementia

• Alzheimer´s disease most prevalent cause
  • Often diagnosed early because of memory problems
  • Caregivers provide info
  • Ask patients about diagnosis and what she knows
  • Patient has insight in early stages
• Lewy Body Dementia – fluctuations, hallucinations
• Frontotemporal dementia – personality changes. Lack of insight. Memory preserved early.
Evaluation of cognitive impairment

• Brief encounter – patient appears lucid and oriented

• Objective testing necessary
  • Screening – MiniCog
  • More detailed test: Mini Mental State Examination (MMSE)

• Talk to caregiver perhaps most important. Changes over time? How was she 10 years ago?
Mini-Cog™

Instructions for Administration & Scoring

ID: ____________ Date: ________________

Step 1: Three Word Registration

Look directly at person and say, “Please listen carefully. I am going to say three words that I want you to repeat back to me now and try to remember. The words are [select a list of words from the versions below]. Please say them for me now.” If the person is unable to repeat the words after three attempts, move on to Step 2 (clock drawing).

The following and other word lists have been used in one or more clinical studies. For repeated administrations, use of an alternative word list is recommended.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Banana</td>
<td>Leader</td>
<td>Village</td>
<td>River</td>
<td>Captain</td>
<td>Daughter</td>
</tr>
<tr>
<td>Sunrise</td>
<td>Season</td>
<td>Kitchen</td>
<td>Nation</td>
<td>Garden</td>
<td>Haven</td>
</tr>
<tr>
<td>Chair</td>
<td>Table</td>
<td>Baby</td>
<td>Finger</td>
<td>Picture</td>
<td>Mountain</td>
</tr>
</tbody>
</table>

Step 2: Clock Drawing

Say, “Next, I want you to draw a clock for me. First, put in all of the numbers where they go.” When that is completed, say, “Now, set the hands to 10 past 1.”

Use preprinted circle (see next page) for this exercise. Repeat instructions as needed as this is not a memory test. Move to Step 3 if the clock is not complete within three minutes.

Step 3: Three Word Recall

Ask the person to recall the three words you stated in Step 1. Say, “What were the three words I asked you to remember?” Record the word list version number and the person’s answers below.

Word List Version: _____ Person’s Answers: _______________ _______________ _______________

Scoring

<table>
<thead>
<tr>
<th>Word Recall: _____ (0-3 points)</th>
<th>1 point for each word spontaneously recalled without cuing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clock Draw: _____ (0 or 2 points)</td>
<td>Normal clock = 2 points. A normal clock has all numbers placed in the correct sequence and approximately correct position (e.g., 12, 3, 6 and 9 are in anchor positions) with no missing or duplicate numbers. Hands are pointing to the 1 and 2 (little). Hand length is not scored. Inability or refusal to draw a clock (abnormal) = 0 points.</td>
</tr>
<tr>
<td>Total Score: _____ (0-5 points)</td>
<td>Total score = Word Recall score + Clock Draw score. A cut point of &lt; 3 on the Mini-Cog™ has been validated for dementia screening, but many individuals with clinically meaningful cognitive impairment will score higher. When greater sensitivity is desired, a cut point of &lt; 4 is recommended as it may indicate a need for further evaluation of cognitive status.</td>
</tr>
</tbody>
</table>

Mini-Cog™ © S. Benjamin. All rights reserved. Reprinted with permission of the author solely for clinical and educational purposes. May not be modified or used for commercial, marketing, or research purposes without permission of the author (soob@uw.edu). v. 0.019.16
ID: ___________ Dato: ________________
Clinical practice

• Screening to detect cognitive impairment

• Further investigations if positive screening

• Ability to consent to treatment?

• Ability to adhere to treatment?

• Caregiver support
Geriatric assessment (GA)\(^1\)

- Functional status
- Comorbidity
- Polypharmacy
- Cognitive function/ dementia
- Nutritional status
- Depression
- Social support

Remaining life expectancy
Detection of unidentified problems
Optimization before treatment
Prediction of adverse outcomes
Treatment planning
Baseline information

FRAILTY

\(^1\)Wildiers et al, JCO, 2014
Delirium and dementia

• **Delirium**: Acute. Fluctuating. Time limited. Attention affected.

• **Dementia**: Progressive and irreversible

• But – these conditions often coexist
Chemobrain

• Problems with cognition following chemotherapy
• Subjective or objective
• Memory, processing speed, and executive function seem vulnerable
• Few are affected and prognosis is good
Summary

• Cognitive impairment and dementia increases with increasing age

• Screen to detect – affects treatment trajectory

• In cancer patients with dementia – team up with geriatrician
SIOG 2019
INTERATIONAL SOCIETY
OF GERIATRIC ONCOLOGY

19th SIOG Annual Conference, Geneva - Switzerland

SAVE THE DATE - November 14-16, 2019