Supportive and palliative care in lung cancer

Tora Skeidsvoll Solheim, MD, PhD
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Lung cancer

- Lung cancer is still the leading cause of cancer death worldwide
- Despite the advent of novel therapies, irresectable or metastatic non-small-cell lung cancer (NSCLC) remains an incurable disease and the prognosis is less than a year
  - Ref: Hanna et al., 2017
A high proportion of patients with advanced NSCLC experience symptoms, e.g.: fatigue (100 %), loss of appetite (97 %), shortness of breath (95 %), cough (93 %), pain (92 %), and blood in sputum (63 %)


<table>
<thead>
<tr>
<th>LCSS Lung Cancer Symptom Scale</th>
<th>N</th>
<th>Agreement (%)</th>
<th>Kappa</th>
<th>Concordance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of appetite</td>
<td>424</td>
<td>36.3</td>
<td>0.17</td>
<td>Slight</td>
</tr>
<tr>
<td>Fatigue</td>
<td>420</td>
<td>39.8</td>
<td>0.20</td>
<td>Slight</td>
</tr>
<tr>
<td>Cough</td>
<td>420</td>
<td>38.6</td>
<td>0.24</td>
<td>Fair</td>
</tr>
<tr>
<td>Shortness of breath</td>
<td>414</td>
<td>45.4</td>
<td>0.29</td>
<td>Fair</td>
</tr>
<tr>
<td>Blood in sputum</td>
<td>417</td>
<td>70.0</td>
<td>0.46</td>
<td>Moderate</td>
</tr>
<tr>
<td>Pain</td>
<td>412</td>
<td>45.4</td>
<td>0.28</td>
<td>Fair</td>
</tr>
<tr>
<td>Overall</td>
<td>392</td>
<td>37.5</td>
<td>0.16</td>
<td>Slight</td>
</tr>
<tr>
<td>Symptom</td>
<td>Rating</td>
<td>Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Pain</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Tiredness (Tiredness = lack of energy)</td>
<td>0</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Drowsiness (Drowsiness = feeling sleepy)</td>
<td>0</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Nausea</td>
<td>0</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Lack of Appetite</td>
<td>0</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Shortness of Breath</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Depression (Depression = feeling sad)</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Anxiety (Anxiety = feeling nervous)</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best Wellbeing (Wellbeing = how you feel overall)</td>
<td>0</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Other Problem (for example constipation)</td>
<td>0</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Completed by (check one):**
- Patient
- Family caregiver
- Health care professional caregiver
- Caregiver-assisted

**Patient's Name:**

**Date:**

**Time:**
Function

Participation/empowerment

Quality of life

- Exercise capacity
- Pain
- Distress
- Reduced nutrition
- Sexuality
- Fatigue
- Social network
- Economy

Exercise capacity

Pain

Distress

Reduced nutrition

Sexuality

Fatigue

Social network

Economy
WHOs definition of palliative care

• Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other, physical, psychosocial and spiritual.(...)
WHO's definition of palliative care

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www.ntnu.no/prc
European Palliative Care Research Centre (PRC)
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Palliative care

• Relationship building with patient and family caregivers
• Symptom, distress, and functional status management
• Exploration of understanding and education about illness and prognosis
• Clarification of treatment goals
• Assessment and support of coping needs
• Assistance with medical decision making
• Coordination of, and referrals to, other care providers
Palliative care is applicable early in the course of illness

Parikh NEJM 2013
Trajectory of Performance Status and Symptom Scores for Patients With Cancer During the Last Six Months of Life

Hsiem Seow, Lisa Barben, Rinku Sutrading, Doris Howell, Deborah Dudgeon, Clare Atzena, Ying Liu, Amna Husain, Jonathan Swanson, and Craig Earle

Ref: Seow H et al, JCO March 2011
Early Palliative Care for Patients with Metastatic Non–Small-Cell Lung Cancer


Ref: Temel et al. NEJM 2010
Fewer patients in the palliative care group than in the standard care group had depressive symptoms (16% vs. 38%, *P* = 0.01).

Quality of life: FACT-L scale 98.0 vs. 91.5; *P* = 0.03

O.S 11.6 vs 8.9 months
Several other studies followed
Integration of Palliative Care Into Standard Oncology Care; ASCO Clinical Practice Guidelines Update

Based on nine RCTs, five quasi-experimental studies, five secondary publications (from RCTs)

Inpatients and outpatients with advanced cancer should receive dedicated palliative care service
- Early
- Concurrent with active treatment

Integration of Palliative Care Into Standard Oncology Care: American Society of Clinical Oncology Clinical Practice Guideline Update

ABSTRACT
Purpose
To provide evidence-based recommendations to oncology clinicians, patients, family and friends caregivers, and palliative care specialists to update the 2012 American Society of Clinical Oncology (ASCO) provisional clinical opinion (PCO) on the integration of palliative care into standard oncology care for all patients diagnosed with cancer.

Methods
ASCO convened an Expert Panel of members of the ASCO Ad Hoc Palliative Care Expert Panel to develop an update. The 2012 PCO was based on a review of a randomized controlled trial (RCT) by the National Cancer Institute Physicians Data Query and additional trials. The panel conducted an updated systematic review seeking randomized clinical trials, systematic reviews, and meta-analyses, as well as secondary analyses of RCTs in the 2012 PCO, published from March 2010 to January 2016.

Results
The guideline update reflects changes in evidence since the previous guideline. Nine RCTs, one quasirexperimental trial, and five secondary analyses from RCTs in the 2012 PCO on providing palliative care services to patients with cancer and/or their caregivers, including family caregivers, were found to inform the update.

Recommendations
Inpatient and outpatient with advanced cancer should receive dedicated palliative care services, early in the disease course, concurrent with active treatment. Referral of patients to interdisciplinary palliative care teams is optimal, and services may complement existing programs. Providers may refer family and friends caregivers of patients with early or advanced cancer to palliative care services.

J Clin Oncol 38:96-112. © 2016 by American Society of Clinical Oncology
General Recommendations

A1. Clinical question–General (note: clinical question from 2015). Which patients with stage IV NSCLC should be treated with chemotherapy?

Recommendation A1.a. (from 2015): For patients with performance status (PS) of 0 or 1 receiving chemotherapy (italicized words added in 2017), a combination of two cytotoxic drugs is recommended. Platinum combinations are recommended over nonplatinum therapy; however, nonplatinum therapy combinations are recommended for patients who have contraindications to platinum therapy. Chemotherapy may also be used to treat selected patients with PS of 2 who desire aggressive treatment after a thorough discussion of the risks and benefits of such treatment.

Recommendation A1.b. (from 2015): Because there is no cure for patients with stage IV NSCLC, early concomitant palliative care assistance has improved the survival and well-being of patients and is therefore recommended.
Content of palliative care in these studies?

• Intervention shortly after diagnosis of advanced cancer

• Varying interventions, different combinations
  – Appointments with palliative care specialist and nurses
  – Phone calls (weekly/monthly)
  – Comprehensive assessments / systematic checklists
  – Education: prognosis, options, advance care planning, use of hospice
  – Interdisciplinary team
We do not know:

• When is “early”?  
• What is the optimal content of palliative care?  
• What is the optimal level of integration?  
• For whom should early integrated palliative care be introduced?
Teamwork is necessary to achieve good palliative care
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- Dietitian
- Physical therapist
- Psychologist
- Dentist
- Pharmacist
- Friends and family
- Oncology team
- Nurse
- Spiritual guide
- Speech language pathologist
- Social worker
- Friends and family
- Oncology team
- Nurse
- Spiritual guide
- Speech language pathologist
- Social worker
- HRQL improved more (34% v 18%) and worsened among fewer (38% v 53%)
- Less frequently admitted to the ER (34% v 41%)
- Remained on chemotherapy longer (8.2 v 6.3 m)

O.S 31.2 months (95% CI, 24.5-39.6) vs 26.0 months (95% CI, 22.1-30.9)
How to deal with symptoms and complaints?

• All physicians working with patients with cancer

• At first meeting, do not accept «this is how it is to live with lung cancer»

• Most important:
  – Preferably do a systematic registration of symptoms
  – Take a proper medical history and do a proper work up

• Early palliative care
Literature on palliative and supportive care

- Palliative Care Formulary (PCF6)
- Your local national/institutional palliative care guidelines
- NICE guidelines
- http://esmo.org/Guidelines/Supportive-and-Palliative-Care
Example: cachexia
Example: cachexia

- Cancer cachexia is a multidimensional syndrome with on-going muscle loss (and often fat loss)
- It cannot be cured by conventional nutrition alone
- Leads to progressive functional impairment

Example: cachexia

In prep: ESMO guidelines for treatment of cancer cachexia
Risk factors related to muscle- and weight loss

Nutritional impact symptoms

Physical inactivity

Side effects of treatment

Psychosocial situation, age

Weight loss in cancer

Appetite loss, changes in taste and smell and/or early satiety

Reduced muscle function

Reduced muscle mass

Reduced fat mass

Tumor causes inflammation, endocrine dysfunction and altered metabolism

Cachexia pathophysiology

In prep: ESMO guidelines for treatment of cancer cachexia
Trajectory of cachexia

Precachexia
- Weight loss ≤5%
- Anorexia and metabolic change

Cachexia
- Weight loss >5% or
- BMI <20 and weight loss >2% or sarcopenia and weight loss >2%
- Often reduced food intake/systemic inflammation

Refractory cachexia
- Variable degree of cachexia
- Cancer disease both procatabolic and not responsive to anticancer treatment
- Low performance score
- <3 months expected survival

Death

ref. Fearon K, et al. 2008
Example: cachexia

In prep: ESMO guidelines for treatment of cancer cachexia
Summary: Supportive and palliative care in lung cancer

- Patient-centered, always include caregivers if possible
- Early integration
- Interdisciplinary teams
- Systematic symptom assessment
- Diagnostics
- Treatment
  - Treatment includes both starting and withdrawal of medications (as well as radiotherapy and surgery)
  - Information and education (illness, prognosis, coping needs, treatment goals)
Thank you for your attention

Trondheim University Hospital