Supportive Care in Oncology in Eastern European Countries

MASCC/ISOO Annual Meeting
Vienna, 30th June 2018

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Czech Republic
Author’s disclosure

Angelini Pharma honorarium for lectures

Nothing else for disclosure
Implementation of supportive care (SC) into cancer treatment in EE countries

Regional Education Meetings on Supportive Care in Cancer Patients for Eastern European and Balkan region, Belgrade 2016, 2017

Delegates from Poland, Romania, Bulgaria, Slovakia, Czechia
Supportive and palliative care in cancer

- Supportive care
- Palliative care
- Palliative symptomatic therapy

Cancer trajectory:
- Cured
- Survivors
- Relaps
- Progression

Cancer treatment:
- Supportive care

Diagram showing the relationship between cancer trajectory, cancer treatment, and supportive care.
Increasing availability of palliative care in EE countries

- National societies for palliative medicine
  - Palliativists 6-15 per 1 mil. inhabitants

- Inpatient units
- Outpatient clinics
- Palliative home services
- Day centers
- Call centers

- Textbooks for healthcare professionals
- Booklets for patients and their families

- Postgradual education
Distribution of palliative care inpatient units in Romania, population of 20 millions
## Figures of specialists in Poland
population of 38 millions

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Counts</th>
<th>Per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palliativists</td>
<td>460</td>
<td>1.2</td>
</tr>
<tr>
<td>Oncologists</td>
<td>879</td>
<td>2.2</td>
</tr>
<tr>
<td>Radiotherapists</td>
<td>770</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Centers of excellence**

- CENTRUM ONKOLOGII
- CENTRUM ONKOLOGII – INSYTUT IM. MARII SKŁODOWSKIEJ-CURIE
- Świętokrzyskie Centrum Onkologii
- Klinika Onkologii radioterapii
- Wielkopolskie Centrum Onkologii
Organization of supportive care (SC) in EE countries

- SC is integrated into cancer treatment
- No specific national organizations
- Oncologists are responsible for the effective SC, but often in a shortage of time
- Cancer treatment plays a dominant role
- Some symptoms and side effects of therapy can be tolerated or even overlooked
- Availability / accessibility to some drugs for SC has been improving
Supportive care in clinical practice
management of symptoms / side effects / complications

Oncologist
- CINV
- Myelotoxicity
- Anemia
- Infections
- Bone disease
- Metabolic compl
- Cancer pain
- Malnutrition
- Depression

Specialist
- Pain management
- Nutrition support
- Psychological SC
Importance of Guidelines for SC

- SC is influenced by the available international guidelines
- Translation into national recommendations
- Blue Book 2018
  Czech Oncological Society
  Anticancer therapy guidelines
Guidelines/Guidance for SC
Possible reasons for limited adherence to guidelines for CINV in EE countries

- Underestimation of real incidence of CINV
- Relying on the effects of 5-HT$_3$ inhibitors
- Fear of side effects of dexamethasone
- Limited access to NK$_1$ inhibitors from the 1.cycle of CT (sometimes used only after failure)
- High costs of new antiemetics
  - 2 categories of antiemetics in terms of cost
- Some inconsistencies in guidelines
Potential problems of guidelines in clinical practice

- **Patient-based risk factors**
  - well defined but not taken for decisions

- **MEC category (30-90%) is very broad**
  - not surprisingly were AC combination and carboplatin removed

- **Classification of single agents by emetogenicity**
  is not consistently defined by doses
Complex Oncological Center
supportive care

Hospital Department
Medical Oncology

Hospital Department
Surgical Oncology

Outpatient
Oncological Department

Clinic for pain management

Center for assisted reproduction

Outpatient Nutrition Department

Psychological care
Median overall survival in months according to weight loss and BMI

n=8160

<table>
<thead>
<tr>
<th>Weight loss</th>
<th>BMI 28</th>
<th>25</th>
<th>22</th>
<th>20</th>
</tr>
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<tbody>
<tr>
<td>2,5 %</td>
<td>21,5</td>
<td>19,9</td>
<td>15,7</td>
<td>13,5</td>
</tr>
<tr>
<td>6 %</td>
<td>14,2</td>
<td>11,9</td>
<td>10,5</td>
<td>10,6</td>
</tr>
<tr>
<td>11 %</td>
<td>10,7</td>
<td>9,2</td>
<td>6,8</td>
<td>6,7</td>
</tr>
<tr>
<td>15 %</td>
<td>8,1</td>
<td>8,1</td>
<td>6,2</td>
<td>5,4</td>
</tr>
<tr>
<td></td>
<td>7,1</td>
<td>4,8</td>
<td>4,7</td>
<td>3,7</td>
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### Grading of weight loss amended to BMI

2-dimensional score, grade 0-4

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Median OS for grading of weight loss
n=8160

months

G0: 20.9 months
G1: 14.6 months
G2: 10.8 months
G3: 7.6 months
G4: 4.3 months

Weight loss at the time of diagnosis
high grade non-Hodgkin’s lymphoma, n=206

- Weight loss (WL) >15%: 5.9%
- WL 10-15%: 11.8%
- WL 5-10%: 18.2%
- WL <5%: 14.4%
- Weight stable: 49.7%
Glasgow Prognostic Score (0-2 points)
albumin < 35 g/L, CRP > 10 mg/L
reflects systemic inflammation due to cancer (cancer cachexia)
strong independent prognostic factor

- GPS 0: 54.4%
- GPS 1: 33.5%
- GPS 2: 12.1%
Evaluation of muscle mass from CT scans at the level of L3.
Bioelectrical impedance analysis
InBody 230
Median survival of advanced cancer patients according to BIA Phase Angle, $n=222$

PA reflects body cell mass and nutrition status

$Hui \ D, \ et \ al. \ Cancer \ 2014; \ 120:2207-14.$
Measuring of mHGS
Maximal Handgrip Strength

Motivation for patients to physical activity

Correlates with mortality in cancer patients

Regular exercise can improve symptoms of fatigue, depression, and insomnia.

It can reduce inflammation and side-effects of chemotherapy.

Cancer recurrence
Vitamin D
Baseline serum 25-OHD levels,  NHL n=206
normal range 50-200 nmol/l

- Normal level 50-75 nmol/l: 26.2%
- Insufficiency 30-50 nmol/l: 29.1%
- Deficiency <30 nmol/l: 29.6%
- Optimal level >75 nmol/l: 15.0%
Survival of non-Hodgkin’s lymphoma patients according to baseline serum vitamin D level
MD Anderson Cancer Center, Houston
Drake MT et al., JCO 2010

A. EFS, DLBCL n=370
B. OS, DLBCL
C. EFS, TCL
D. OS, TCL
Baseline serum selenium levels

normal range 0.7-1.2 µmol/l,  n=197
optimal level for GPx activity 1.0-1.5 µmol/l
Multimodal treatment of cancer cachexia to keep muscle mass and function

Nutritional risk screening after diagnosis

- Effective treatment of cancer
- Symptom control
- Pharmacology: antiinflammatory, anabolic therapy
- Nutritional therapy: specific composition
- Supplementation of nutritional deficiencies
- Exercise
- Monitoring of nutritional and functional status
Home enteral nutrition combined with physical activity

Nutrition support in cancer patients is underestimated by some oncologists in EE countries.
Nutritional management of cancer patient

- Proactive access: **nutritional risk screening**
- Early detection of **inflammation and cachexia**
  - mGPS, insulin resistance, proteocatabolism
- Early detection of **nutritional deficiencies**
  - vitamin D, Zn, Se
- Evaluation of **muscle mass and function**
  - routine CT scans at L3
- **Active early nutrition support** when indicated
  - parallel to cancer therapy
ESPEN guidelines on nutrition in cancer patients 2016


Contents lists available at ScienceDirect

Clinical Nutrition

journal homepage: http://www.elsevier.com/locate/cnu

ESPEN Guideline

ESPEN guidelines on nutrition in cancer patients

Jann Arends a, Patrick Bachmann b, Vickie Baracos c, Nicole Barthelemy d, Hartmut Bertz a, Federico Bozzetti e, Ken Fearon f, Elisabeth Hütterer g, Elizabeth Isenring h, Stein Kaasa i, Zeljko Krznaric j, Barry Laird k, Maria Larsson l, Alessandro Laviano m, Stefan Mühlebach n, Maurizio Muscaritoli m, Line Oldervoll i, o, Paula Ravasco p, Tora Solheim q, r, Florian Strasser s, Marian de van der Schueren t, u, Jean-Charles Preiser v, *
Conclusions

SC is not specifically organized in EE countries in contrast to palliative care

SC is probably not fully accepted as important for final outcome by some (busy) oncologists

As an example, proactive nutritional support in the setting of specialized Outpatient Nutrition Department can potentially influence outcome of cancer treatment and should become a part of SC including a part of MASCC agenda
Thank you for your attention