TITLE: Symptom Relief and Palliative Care in Patients with Advanced Cancer Unlikely to Benefit from Chemotherapy: Clinical Evidence and Guidelines

DATE: 21 April 2015

RESEARCH QUESTIONS

1. What are the clinical benefits and harms of symptom relief and palliative care in patients with advanced cancer unlikely to benefit from chemotherapy?

2. What are the clinical benefits and harms of palliative care for patients with serious illness who have physical, psychological, social, or spiritual distress because they are pursuing disease-directed treatment?

3. What are the evidence-based guidelines for symptom relief and palliative care in patients with advanced cancer unlikely to benefit from chemotherapy?

4. What are the evidence-based guidelines for palliative care for patients with serious illness who have physical, psychological, social, or spiritual distress because they are pursuing disease-directed treatment?

KEY FINDINGS

Eight systematic reviews and eight evidence-based guidelines were identified regarding symptom relief and palliative care in cancer.

METHODS

A focused literature search (with main concepts appearing in title or major subject heading) was conducted on key resources including PubMed, The Cochrane Library (2015, Issue 3), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, and guidelines. Where possible, retrieval was limited to the...
human population. The search was also limited to English language documents published between January 1, 2013 and March 23, 2015. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

**SELECTION CRITERIA**

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

<table>
<thead>
<tr>
<th>Table 1: Selection Criteria</th>
</tr>
</thead>
</table>
| **Population** | Questions 1 and 3: Patients with advanced cancer unlikely to benefit from chemotherapy  
| | Questions 2 and 4: Patients with serious illness who have physical, psychological, social, or spiritual distress because they are pursuing disease-directed treatment |
| **Intervention** | Symptom relief and palliative care |
| **Comparator** | Chemotherapy; No palliative care |
| **Outcomes** | Benefits (e.g., survival, mortality) and harms (e.g., quality of life, treatment harms, complications of testing, other harms) |
| **Study Designs** | Health technology assessments, systematic reviews, meta-analyses, evidence-based guidelines |

**RESULTS**

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by evidence-based guidelines.

Eight systematic reviews and eight evidence-based guidelines were identified regarding symptom relief and palliative care for cancer patients. No relevant health technology assessments were identified. In addition, no relevant literature was identified regarding palliative care for patients with serious illness who have physical, psychological, social, or spiritual distress because they are pursuing disease-directed treatment.

Additional references of potential interest are provided in the appendix.

**OVERALL SUMMARY OF FINDINGS**

Eight systematic reviews\(^1\)\(^-\)\(^8\) and eight\(^9\)\(^-\)\(^16\) evidence-based guidelines were identified regarding symptom relief and palliative care for cancer patients.

A summary of the systematic reviews and their conclusions is provided in Table 2, and a summary of recommendations made in the evidence-based guidelines is provided in Table 3.
### Table 2: Summary of Systematic Reviews and Meta-Analyses

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Intervention and Indication</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameron et al. (2014)¹</td>
<td>Palliative pelvic radiotherapy in symptomatic incurable prostate cancer</td>
<td>“…pelvic radiotherapy for symptomatic [prostate cancer] appears to provide effective palliation of a variety of symptoms.”</td>
</tr>
<tr>
<td>Cameron et al. (2014)²</td>
<td>Palliative pelvic radiotherapy of symptomatic incurable rectal cancer</td>
<td>&quot;Palliative pelvic radiotherapy for symptomatic rectal cancer appears to provide relief of a variety of pelvic symptoms…. There is inadequate evidence regarding onset, duration and degree of symptom palliation, QOL and associated toxicity with this treatment and prospective studies are therefore needed.”</td>
</tr>
<tr>
<td>Lian et al. (2014)³</td>
<td>Acupuncture in cancer</td>
<td>“…the effectiveness of acupuncture in palliative care for cancer patients is promising, especially in reducing chemotherapy or radiotherapy induced side effects and cancer pain.”</td>
</tr>
<tr>
<td>Miller et al. (2014)⁴</td>
<td>Corticosteroid therapy in cancer</td>
<td>“Corticosteroids are beneficial in treating anorexia in palliative care patients with malignancies…”</td>
</tr>
<tr>
<td>Paul et al. (2014)⁵</td>
<td>Palliative surgery for malignant bowel obstruction from peritoneal carcinomatosis</td>
<td>“Although palliative surgery can benefit patients, it comes at the cost of high mortality and substantial hospitalization relative to the patient's remaining survival time.”</td>
</tr>
<tr>
<td>Amdal et al. (2013)⁶</td>
<td>Palliative radiotherapy and/or chemotherapy in esophageal cancer</td>
<td>“Brachytherapy, external radiotherapy and combination chemotherapy improved HRQL and dysphagia in the few identified studies with sufficient PRO methodology.”</td>
</tr>
<tr>
<td>Barathi et al. (2013)⁷</td>
<td>Palliative sedation in terminal cancer</td>
<td>“…palliative sedation does not shorten survival in terminally ill cancer patients.”</td>
</tr>
<tr>
<td>Sun et al. (2013)⁸</td>
<td>Palliative gastrectomy in advanced gastric cancer</td>
<td>“…palliative gastrectomy for patients with incurable advanced gastric cancer may be associated with longer survival, especially for patients with stage M1 gastric cancer.”</td>
</tr>
</tbody>
</table>

HRQL = Health related quality of life; M1 = metastasis to distant organs; PRO = patient reported outcomes; QOL = quality of life.

*Verbatim conclusions as presented in the abstract.*

### Table 3: Summary of Guidelines and Recommendations

<table>
<thead>
<tr>
<th>Author/Organization (Year)</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cookson et al. (2014)⁹</td>
<td>“Clinicians should offer palliative care to patients with mCRPC with poor performance status who received prior docetaxel chemotherapy. Alternatively, for selected patients, clinicians may offer treatment with abiraterone + prednisone, enzalutamide, ketoconazole + steroid or radionuclide therapy. (Expert Opinion)” page 2</td>
</tr>
</tbody>
</table>
| NICE (2014)¹⁰             | “Information and support 1.5.1 Offer men with metastatic prostate cancer tailored information and access to specialist urology and palliative care teams to address the
### Table 3: Summary of Guidelines and Recommendations

<table>
<thead>
<tr>
<th>Author/Organization (Year)</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For patients with poor prognosis, options include WBRT, best supportive care, and/or palliative care.” page 2101</strong></td>
<td>Ramakrishna et al. (2014)¹¹</td>
</tr>
<tr>
<td>“All patients with lung cancer should have access to a specialist palliative care team.” page 5</td>
<td>SIGN (2014)¹²</td>
</tr>
<tr>
<td>“2.4.1. For patients with stage IV lung cancer and/or a high symptom burden, it is suggested that palliative care combined with standard oncology care be introduced early in the treatment course (Grade 2B). 3.3.1. It is recommended that all physicians caring for patients with lung cancer should begin conversations about the patient’s prognosis and goals of care at the time of the diagnosis, and continue these throughout the course of the illness (Grade 1B). 3.3.2. It is recommended that all physicians caring for patients with advanced lung cancer should initiate conversations about the goals of care; the pros and cons of life-sustaining treatment and end-of-life care options (Grade 1B).” pages e498S – e499S</td>
<td>ACCP (2013)¹³</td>
</tr>
<tr>
<td>“Palliative radiotherapy is recommended for relief of specific symptoms and prophylactic prevention of symptom development.” page 4</td>
<td>AHS (2013)¹⁴</td>
</tr>
<tr>
<td>“Leiomyosarcoma Stage IVA (tumour invades bladder and/or rectum):  • Palliative chemotherapy may be used in patients for whom surgery is not an option.  • Palliative radiotherapy may be used for specific symptom control (e.g. bleeding, pain). Stage IVB (distant metastasis):  • Palliative chemotherapy may be used in patients for whom surgery is not an option.  • Palliative radiotherapy may be used for specific symptom control (e.g. bleeding, pain).” page 5</td>
<td>AHS (2013)¹⁵</td>
</tr>
</tbody>
</table>
### Table 3: Summary of Guidelines and Recommendations

<table>
<thead>
<tr>
<th>Author/Organization (Year)</th>
<th>Recommendations&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“Undifferentiated Endometrial Sarcoma”&lt;br&gt;“Stage IVA (tumour invades bladder and/or rectum):&lt;br&gt;• Palliative radiotherapy, if surgery is not an option.&lt;br&gt;• Palliative chemotherapy, if surgery is not an option.”&lt;br&gt;Stage IVB (distant metastasis):&lt;br&gt;• Palliative chemotherapy and/or radiotherapy if surgery is not an option.&lt;br&gt;• Palliative radiotherapy may be used for specific symptom control (e.g. bleeding, pain).&lt;br&gt;• Palliative chemotherapy may be used in patients who have unresectable disease.” page 6</td>
</tr>
</tbody>
</table>

<sup>a</sup>Verbatim recommendations provided, with the exception of the JSPM 2013 guideline.

ACCP = American College of Chest Physicians; AHS = Alberta Health Services; JSPM = Japanese Society of Palliative Medicine; mCRPC = metastatic castration-resistant prostate cancer; NICE = National Institute for Health and Care Excellence; SIGN = Scottish Intercollegiate Guidelines Network; WBRT = whole brain radiotherapy.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses


Guidelines and Recommendations

See: Index Patient 6, Guideline Statement 20, page 2

See: 1.5 Metastatic prostate cancer, Information and support

See: Key Recommendations, page 2011

See: Key recommendations, page 5

See: Summary of Recommendations, pages e498S-e499S

See: Recommendation 11, page 4

See: Recommendations, Leiomyosarcoma and Undifferentiated Endometrial Sarcoma, pages 5 to 6
See: Table 2: Recommendations, pages 897 to 899

PREPARED BY:
Canadian Agency for Drugs and Technologies in Health
Tel: 1-866-898-8439
www.cadth.ca
APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies


Guidelines and Recommendations – Unclear Methodology


Review Articles


