Evidence-Based Series 4-5 [TO BE UPDATED]

A Quality Initiative of the Program in Evidence-Based Care (PEBC), Cancer Care Ontario (CCO)

Primary Treatment for Locally Advanced Cervical Cancer: Concurrent Platinum-based Chemotherapy and Radiation

H. Lukka, H. Hirte, A. Fyles, G. Thomas, M. Fung Kee Fung, M. Johnston, and members of the Gynecology Cancer Disease Site Group

Evidence-Based Series 4-5 was reviewed on January 2016 and the Gynecology Cancer Disease Site Group made the decision to UPDATE it on June 7, 2016.

(See Section 3: Document Review Summary and Tool for details.)

This Evidence-based Series (EBS) consists of 3 sections and is available on the CCO website on the PEBC Gynecologic Cancer DSG page.

Section 1: Summary [TO BE UPDATED]
Section 2: Full Report [TO BE UPDATED]
Section 3: Document Review Summary and Review Tool

Report Date: June 7th, 2016

For information about the PEBC and the most current version of all reports, please visit the CCO website at http://www.cancercare.on.ca/ or contact the PEBC office at:
Phone: 905-527-4322 ext. 42822 Fax: 905-526-6775 E-mail: ccopgi@mcmaster.ca

Guideline Report History

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Original Report Date: June 2004

The 2004 guideline recommendations

REQUIRE AN UPDATE

This means that the recommendations require additional evidence but are relevant for decision making.

Guideline Question

For women with cervical cancer in whom radiotherapy is considered appropriate, does the addition of concurrent platinum-based chemotherapy improve survival and quality of life with acceptable toxicity?

Target Population

These recommendations apply to women with cervical cancer for whom primary treatment with radiotherapy is being considered:

- those with locally advanced cervical cancer,
- those with bulky clinical stage IB (>4 cm) cervical cancer, who are treated with radiotherapy,
- those with high-risk early-stage cervical cancer (node-positive or margin-positive), who will be treated with radiotherapy following hysterectomy.

Recommendations
- Women with cervical cancer for whom treatment with radiotherapy is being considered (described above) should be offered concurrent cisplatin with their course of radiotherapy.
- There are no direct comparisons of different cisplatin regimens. Based on the review of the available toxicity data from the randomized controlled trials, the Disease Site Group felt that cisplatinum should be given weekly (40 mg/m²).

Qualifying Statements
- Despite this recommendation, other schedules and doses have been used; thus, there is no conclusive evidence that one dose and schedule is better than the other.
- There is insufficient evidence available to make recommendations on the addition of 5-fluorouracil to cisplatin during radiotherapy

Methods
Entries to MEDLINE (1966 through June 2004), EMBASE (1980 through week 25, 2004), CANCERLIT (1975 through October 2002), and Cochrane Library (2004, Issue 2) databases and abstracts published in the proceedings of the annual meetings of the American Society of Clinical Oncology from 1999 to 2004 were systematically searched for evidence relevant to this practice guideline report.

Evidence was selected and reviewed by members of the Practice Guidelines Initiative’s Gynecology Cancer Disease Site Group and methodologists. This practice guideline report has been reviewed and approved by the Gynecology Cancer Disease Site Group, comprised of medical oncologists, radiation oncologists, a pathologist, an oncology nurse and patient representatives.

External review by Ontario practitioners is obtained for all practice guideline reports through a mailed survey. Final approval of the practice guideline report is obtained from the Practice Guidelines Coordinating Committee.

The Practice Guidelines Initiative has a formal standardized process to ensure the currency of each guideline report. This process consists of the periodic review and evaluation of the scientific literature and, where appropriate, integration of this literature with the original guideline information.

Key Evidence
- Eight randomized controlled trials were eligible for the evidence review: six compared cisplatin-based chemotherapy plus radiotherapy to radiotherapy alone (in one of those trials, para-aortic radiotherapy was added to pelvic radiotherapy in the control arm) and two compared cisplatin-based chemotherapy plus radiotherapy to radiotherapy plus hydroxyurea.
- The guideline authors pooled survival data from published reports. Pooled survival rates detected a statistically significant effect in favour of cisplatin-based chemotherapy plus radiotherapy compared with radiotherapy alone or with hydroxyurea (relative risk of death, 0.74; 95% confidence interval, 0.64 to 0.86).
The pooled relative risk of death among the six trials that enrolled only women with locally advanced cervical cancer was 0.78 (95% confidence interval, 0.67 to 0.90) in favour of cisplatin-based chemotherapy and radiotherapy.

The pooled relative risk for the two trials in high-risk early-stage disease also demonstrated a significant benefit for the addition of cisplatin-based chemotherapy to radiotherapy (relative risk, 0.56; 95% confidence interval, 0.41 to 0.77).

Rates of serious hematologic, gastrointestinal and genitourinary acute adverse effects are higher with cisplatin-based chemotherapy plus radiotherapy than with radiotherapy alone.

For further information about this practice guideline, please contact: Dr. Michael Fung Kee Fung, Chair, Gynecology Disease Site Group; Ottawa General Hospital, 501 Smyth Road, Ottawa, Ontario; Telephone: 613-737-8560, FAX: 613-737-8828

The Practice Guidelines Initiative is sponsored by: Cancer Care Ontario & the Ontario Ministry of Health and Long-term Care.

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