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Guideline 17-12

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

Indications for Hyperthermic Intraperitoneal Chemotherapy with Cytoreductive Surgery

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An assessment conducted in January 2023 deferred the review of Guideline 17-12. This means that the document remains current until it is assessed again next year. The PEBC has a formal and standardized process to ensure the currency of each document (PEBC Assessment & Review Protocol)

Guideline 17-12 is comprised of 5 sections. You can access the summary and full report here:
https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/61856

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Indications for Hyperthermic Intraperitoneal Chemotherapy with Cytoreductive Surgery

Recommendations

This is a quick reference guide and provides the guideline recommendations only. For key evidence associated with each recommendation, the systematic review, and the guideline development process, see the Full Report.

GUIDELINE OBJECTIVES

To determine evidence-based indications for hyperthermic intraperitoneal chemotherapy (HIPEC) with cytoreductive surgery (CRS).

TARGET POPULATION

Adults (≥18 years old) with a diagnosis of mesothelioma, appendiceal (including appendiceal mucinous neoplasm), colorectal, gastric, ovarian, or primary peritoneal carcinoma.

INTENDED USERS

This guideline is intended for clinicians involved in the care of patients with mesothelioma, appendiceal (including appendiceal mucinous neoplasm), colorectal, gastric, ovarian, or primary peritoneal carcinoma.

RECOMMENDATIONS, KEY EVIDENCE, AND INTERPRETATION OF EVIDENCE

NOTE: This guideline addresses the role of HIPEC with CRS and not the role of CRS alone. Interventions and terms are reported as stated in the individual papers. While there is a lack of evidence to make recommendations for many of the target sites, it is noted that there are a large number of ongoing randomized controlled trials (RCTs). This guideline will be reviewed annually for any new evidence. When writing these recommendations, the Working Group considered overall survival (OS) to be a critical outcome, and progression-free survival (PFS), recurrence-free survival (RFS), adverse events, and quality of life (QoL) to be important outcomes. Some patient input was sought and patients identified that all of the outcomes mentioned would be important to them in making any treatment decisions.

Recommendation 1a
For patients with newly diagnosed, primary stage III epithelial ovarian, fallopian tube, or primary peritoneal carcinoma, HIPEC should be considered for those with at least stable disease following neoadjuvant chemotherapy at the time of interval CRS if complete or optimal cytoreduction is achieved.
Qualifying Statements for Recommendation 1a
The Working Group members recommend prospectively collecting data on these patients to evaluate real-world outcomes and applicability.

Recommendation 1b
There is insufficient evidence to recommend the addition of HIPEC when primary CRS is performed for patients with newly diagnosed, primary advanced epithelial ovarian, fallopian tube, or primary peritoneal carcinoma outside of a clinical trial.

Recommendation 2
There is insufficient evidence to recommend HIPEC with CRS in patients with recurrent ovarian cancer outside of a clinical trial.

Recommendation 3
There is insufficient evidence to recommend HIPEC with CRS in patients with peritoneal colorectal carcinomatosis outside of a clinical trial.

Recommendation 4
There is insufficient evidence to recommend HIPEC with CRS for the prevention of peritoneal carcinomatosis in CRC outside of a clinical trial; however HIPEC using oxaliplatin is not recommended.

Recommendation 5
There is insufficient evidence to recommend HIPEC with CRS for the treatment of gastric peritoneal carcinomatosis outside of a clinical trial.

Recommendation 6
There is insufficient evidence to recommend HIPEC with CRS for the prevention of gastric peritoneal carcinomatosis outside of a clinical trial.

Recommendation 7
There is insufficient evidence to recommend HIPEC with CRS in patients with malignant peritoneal mesothelioma as a standard of care; however, patients should be referred to HIPEC specialty centres for assessment for treatment as part of an ongoing research protocol.
Qualifying Statements for Recommendation 7
• The Working Group members recommend prospective research protocols with standardized treatment approaches at high-volume centres as this will provide survival benchmarks and feasibility data for future comparative studies.

Recommendation 8
There is insufficient evidence to recommend HIPEC with CRS in patients with disseminated mucinous neoplasm in the appendix as a standard of care; however, patients should be referred to HIPEC specialty centres for assessment for treatment as part of an ongoing research protocol.
Qualifying Statements for Recommendation 8
• The Working Group members recommend prospective research protocols with standardized treatment approaches at high-volume centres as this will provide survival benchmarks and feasibility data for future comparative studies.