MASCC™ MULTINATIONAL ASSOCIATION OF SUPPORTIVE CARE IN CANCER

14 Aug 2021

PALLIATIVE CARE STUDY GROUP

Summary Review

MASCC Guideline:

Medical management of malignant bowel obstruction in patients with advanced cancer

Citation:

Davis, M., Hui, D., Davies, A. et al. Medical management of malignant bowel obstruction in patients with advanced cancer: 2021 MASCC guideline update. Support Care Cancer (2021). https://doi.org/10.1007/s00520-021-06438-9

Abstract:

Background: Malignant bowel obstruction (MBO) is a frequent complication in patients with advanced cancer, particularly colon or gynecological malignancies. MASCC previously published a guideline for symptom management of MBO in 2017. This is a 5-year update.

Methods: A systematic search and review of relevant literature includes a review published in 2010 and 2017. The guideline update used the same literature search process as followed in 2015. The dates of the new search included 2015 up to February 2, 2021. The guidelines involved the pharmacologic management of nausea and vomiting in malignant bowel obstruction (MBO) only. Only randomized trials were included in the updated guideline as evidence. The evidence was reviewed by the panel and the MASCC criteria for establishing a guideline were followed using MASCC level of grading and category of evidence.

Results: There was one systematic review and 3 randomized trials accepted as evidence from 257 abstracts. Octreotide is effective in reducing gastrointestinal secretions and colic and thereby reduces nausea and vomiting caused by MBO. Scopolamine butylbromide is inferior to octreotide in the doses used in the comparison study. Olanzapine or metoclopramide may be effective in reducing nausea and vomiting secondary to partial bowel obstructions. The panel suggests using either drug. Additional studies are needed to clarify benefits. Haloperidol has been used by convention as an antiemetic but has not been subjected to a randomized comparison. Ranitidine plus dexamethasone may be effective in reducing nausea and vomiting from MBO but cannot be recommended until there is a comparison with octreotide.

Discussion: Octreotide remains the drug of choice in managing MBO. Ranitidine was used in one randomized trial in all participants and so its effectiveness as a single drug is not known until there is a

randomized comparison with octreotide. Antiemetics such as metoclopramide and olanzapine may be effective, but we have very few randomized trials of antiemetics in MBO.
Conclusion: The panel recommends octreotide in non-operable MBO. Randomized trials are needed to clarify ranitidine and antiemetic choices.

Guideline Statements:

Octreotide should be considered as a front-line treatment for inoperable MBO
Level of evidence – I; Grade of evidence – A; Guideline – Recommend

Metoclopramide is an active antiemetic in the management of MBO
Level of evidence – III; Grade of evidence – B; Guideline – Suggestion used

Olanzapine is an active antiemetic in the management of MBO
Level of evidence – III; Grade of evidence – B; Guideline – Suggestion used

Haloperidol is an active antiemetic in the management of MBO
Level of evidence – III-IV; Grade of evidence – B; Guideline – Suggestion used

Dexamethasone may be considered in the treatment of MBO
Level of evidence – III; Grade of evidence – B; Guideline – Suggestion used

Ranitidine may be active in reducing symptoms from MBO
Level of evidence – III; Grade of evidence – B; Guideline – More evidence needed

Levels of Evidence and Grading/Categories of Guidelines:

Level I: Evidence obtained from meta-analysis of multiple, well-designed, controlled studies; randomized trials with low false-positive and false-negative errors (high power).
Level II: Evidence obtained from at least one-well designed experimental study; randomized trials with high false-positive and/or false-negative errors (low power).
Level III: Evidence obtained from well-designed, quasi-experimental studies, such as nonrandomized, controlled single-group, pretest-posttest comparison, cohort, time, or matched case-control series.
Level IV: Evidence obtained from well-designed, non-experimental studies, such as comparative and correlational descriptive and case studies.
Level V: Evidence obtained from case reports and clinical examples.

Grade A: Evidence of type I or consistent findings from multiple studies of type II, III, or IV

Grade B: Evidence of types II, III, or IV and findings are generally consistent
Grade C: Evidence of types II, III, or IV and findings are inconsistent
Grade D: Little or no systematic empirical evidence

Recommendation: Reserved for guidelines that are based on Level I or Level II evidence.
Suggestion: Used for guidelines that are based on Level III, Level IV, and Level V evidence; this implies panel consensus on the interpretation of this evidence.
No guideline possible: Used when there is insufficient evidence on which to base a guideline; this implies (1) that there is little or no evidence regarding the practice in question, or (2) that the panel lacks consensus on the interpretation of existing evidence.

Adapted from Somerfield et al. ASCO Clinical Practice Guidelines: Process, Progress, Pitfalls and Prospects. Classic Papers and Current Comments, 4(4); 881-886, 2000.