MASCC™ MULTINATIONAL ASSOCIATION OF SUPPORTIVE CARE IN CANCER

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CANCER PAIN SUBGROUP

Summary Review

MASCC Guideline:

Cannabis for Cancer-Related Pain, and Risk of Harms and Adverse Events

Citation:

To J, Davis M, Sbrana A, Alderman B, Hui D, Mukhopadhyay S, Bouleuc C, Case AA, Amano K, Crawford GP, de Feo G, Tanco K, Garsed J. MASCC guideline: cannabis for cancer-related pain and risk of harms and adverse events. Support Care Cancer. 2023 Mar 6;31(4):202. doi: 10.1007/s00520-023-07662-1.

Abstract:

Background: Approximately 18% of patients with cancer use cannabis at one time or another as palliation or treatment of their cancer. We performed a systematic review of randomized cannabis cancer trials in order to establish a guideline for its use in pain and to summarize the risk of harms and adverse events when used for any indication in cancer patients.

Methods: A systematic review of randomized trials with or without meta-analysis was carried out from MEDLINE, CCTR, EMBASE, and PsychINFO. The search involved randomized trials of cannabis in cancer patients. The search ended on November 12, 2021. The Jadad grading system was used for grading quality. Inclusion criteria for articles were randomized trials or systematic reviews of randomized trials of cannabinoids versus either placebo or active comparator explicitly in adult patients with cancer.

Results: 34 systematic reviews and randomized trials met the eligibility criteria for cancer pain. Seven were randomized trials involving patients with cancer pain. Two trials had positive primary endpoints which could not be reproduced in similarly designed trials. Two high-quality systematic reviews with meta-analyses found little evidence that cannabinoids are an effective adjuvant or analgesic to cancer pain. Seven systematic reviews and randomized trials related to harms and adverse events were included. There was inconsistent evidence about the types and levels of harm that patients may experience when using cannabinoids.

Conclusions: The MASCC panel recommends against the use of cannabinoids as an adjuvant analgesic for cancer pain and suggests that the potential risk of harm and adverse events be carefully considered for all cancer patients, particularly with treatment with a checkpoint inhibitor.

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

OR

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.

Recommendations:

Cancer Pain
We do not recommend the use of cannabinoids for the management of cancer pain.
Level of evidence – I; Grade of evidence – B; Category of guideline – Recommendation

Given the mixed to largely negative evidence on efficacy based on primary outcomes of randomized trials, the potential of harm, and the availability of other evidence-based therapeutic options with a more favourable benefit-to-risk ratio, we do not recommend the use of cannabinoids in this setting. If considered for use, patients should be carefully monitored, ideally under a clinical trial.

Harms
We recommend against the use of cannabinoids for any indication in cancer patients undergoing treatment with a checkpoint inhibitor.
Level of evidence – III; Grade of evidence – C; Category of guideline – Suggestion

There is retrospective evidence based on two studies of decreased response to checkpoint inhibitors in cannabinoids users with decreased time to tumour progression and decreased overall survival. While this is in limited cancers, the guideline committee recommends against the use of cannabinoids while further studies investigate this relationship.

We suggest that all patients should be carefully screened and counselled on the potential harms of cannabinoids prior to an initiation where the guidelines support its use.
Level of evidence – IV; Grade of evidence – C; Category of guideline – Suggestion

There is limited high-quality data about short- and long-term harms of cannabinoids use in cancer patients. Evidence from other indications should be considered and discussed including risk of drug-drug and drug-disease interactions, cardiovascular risk, neuropsychiatric effects, and hyperemesis. If initiated, the patient should agree to use only the prescribed product to minimise risk of variable constituents which may affect efficacy and potential harms.

We suggest that if cannabinoids are initiated all patients should be regularly reviewed for emergent adverse events.
Level of evidence – IV; Grade of evidence – C; Category of guideline – Suggestion

Adverse events associated with cannabinoids may mimic other symptoms related to cancer. The committee suggests that physicians should be considering the contribution of cannabinoids to new symptoms. This may include decreased response to cancer treatment given the initial evidence of harm associated with combination with checkpoint inhibitors.