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CADTH Reference List

Pain Management in the Emergency Department and Upon Discharge

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Summary of Abstracts

CADTH

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About CADTH: CADTH is an independent, not-for-profit organization responsible for providing Canada's health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs, medical devices, diagnostics, and procedures in our health care system.

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Key Messages

- Specific recommendations were identified in 1 evidence-based guideline regarding the assessment and management of chronic pain in the emergency department.
- Specific recommendations were identified in 1 evidence-based guideline regarding patient flow, care navigation, or the care pathway for patients presenting with chronic pain in the emergency department.
- Specific recommendations were identified in 3 evidence-based guidelines regarding prescriptions for or prescribing of any controlled substances for acute or chronic pain management in the emergency department and upon discharge.

Research Questions

1. What are the evidence-based guidelines regarding the assessment and management of chronic pain in the emergency department?
2. What are the evidence-based guidelines regarding patient flow, care navigation, or the care pathway for patients presenting with chronic pain in the emergency department?
3. What are the evidence-based guidelines regarding prescriptions for or prescribing of any controlled substances for acute or chronic pain management in the emergency department and upon discharge?

Methods

Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including MEDLINE, the Cochrane Database of Systematic Reviews, the International HTA database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were emergency departments and pain. Search filters were applied to limit retrieval to guidelines. Comments, newspaper articles, editorials, and letters were excluded. Where possible, retrieval was limited to the human population. The search was also limited to English-language documents published between January 1, 2016 and December 18, 2020. Internet links were provided, where available.

Selection Criteria and Summary Methods

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed. The Overall Summary of Findings section was based on information available in the abstracts of selected publications. Open access full-text versions of evidence-based guidelines were reviewed when abstracts were not available and relevant recommendations were summarized.

Table 1: Selection Criteria

Criteria	Description
Population	Patients with pain presenting to the emergency department: Q1 and Q2: Patients with chronic pain Q3: Patients with acute or chronic pain
Intervention	Pain management interventions and prescriptions (e.g., care pathways, care navigators, rapid access pain clinics, prescribing of opioids)
Comparator	Not applicable
Outcomes	Q1: Recommendations regarding tools for assessment and management strategies for chronic pain for patients in the emergency department Q2: Recommendations regarding the flow (i.e., movement of patients through a health care facility), the pathway of patients through the health care system, how care is navigated for chronic pain patients both in the emergency department and after discharge Q3: Recommendations regarding the prescription of controlled substances for acute or chronic pain relief or treatment in the emergency department and for patients who are discharged from the emergency department; recommendations regarding the length of time of prescriptions of controlled substances for patients
Study Designs	Evidence-based guidelines

Results

Six relevant guidelines were identified for this report.[1-6] Two evidence-based guidelines[5,6] were identified regarding the assessment and management of chronic pain in the emergency department. One evidence-based guideline[2] was identified regarding patient flow, care navigation, or the care pathway for patients presenting with chronic pain in the emergency department. Five evidence-based guidelines[1-5] were identified regarding prescriptions for or prescribing of any controlled substances for acute or chronic pain management in the emergency department and upon discharge.

Additional references of potential interest that did not meet the inclusion criteria are provided in Appendix 1.

Overall Summary of Findings

Six relevant guidelines were identified for this report.[1-6] Guidelines identified as relevant to the scope of this report but that did not offer specific recommendations based on the available abstract were not summarized.[1,3,5]

Specific recommendations regarding the assessment and management of chronic pain in the emergency department were provided in 1 of the identified guidelines.[6] Specific recommendations regarding patient flow, care navigation, or the care pathway for patients presenting with chronic pain in the emergency department were provided in 1 of the guidelines.[6] Specific recommendations regarding prescriptions for or prescribing of any

controlled substances for acute or chronic pain management in the emergency department and upon discharge were provided in 3 of the identified guidelines.[2,4,6]

Table 2: Summary of Relevant Recommendations

Summary of Recommendations
American College of Emergency Physicians Clinical Policies Subcommittee on Opioids, 2020[1]
Specific recommendations were not available in the abstract.
European Society of Emergency Medicine, 2020[2]
Current European Recommendations: • The 2010 French Society of Emergency Medicine guidelines recommend the use of local and/or regional analgesia for pain management when feasible, with the use of nitrous oxide for slight trauma, and IV morphine for severe pain alone or part of multimodal analgesia (page 2). • The 2015 recommendations from the Italian Intersociety recommend IV paracetamol for pain management (page 3) ◦ Oral paracetamol and NSAIDs for mild pain ◦ IV paracetamol and paracetamol in combination with weak oral opioids for moderate pain ◦ Morphine and fentanyl for severe pain. • 2014 recommendations from the Royal College of Emergency Medicine recommend that monitoring and alleviation of pain be treated as a priority starting at triage in the ED and ensuring that adequate analgesia is provided at, and if appropriate beyond, discharge (page 3). ◦ For moderate and severe pain, analgesia should be provided within 20 minutes of arrival in the ED. **Pharmacological management of acute pain recommendations:**[a] • Pain management should be preceded by pain assessment and recording of pain scores (page 67). • In all cases, consider the use of non-pharmacological analgesic strategies to achieve pain relief (page 67). • Analgesics should be administered orally and titrated if possible until adequate pain management is achieved (page 67). • Pain should be continually reassessed and, if needed, stronger analgesics should be used in conjunction with non-pharmaceutical methods (page 67). • Pharmacological pain management should be based on pain score, delineated by 3 different categories: mild, moderate, and severe (page 71). ◦ Specific pharmacological recommendations for each category can be found on page 71 for adults and 75 for children. • Do not use IV opioids in combination with other IV opioids because of the risks of sedation and respiratory depression (page 72). • Ensure that naloxone reversal is available and ready for use when opioids are administered (page 72). • Only prescribe second-line NSAID analgesia in patients who have not received previous NSAIDs (page 72).
Hachimi-Idrissi et.al, 2020[3]
Specific recommendations were not available in the abstract.
American Academy of Emergency Medicine, 2019[4]
Pharmacological recommendation for the treatment of acute pain in the ED: • Antiemetics are not recommended for routine use in conjunction with IV opioids (page 1).
Godwin et. al, 2019[5]
Specific recommendations were not available in the abstract.
Royal College of Physicians, 2018[6]

Summary of Recommendations
Recommendations for the diagnosis of chronic regional pain syndrome in emergency medicine: (page 21) • A diagnosis of CRPS should not be done before 2-4 weeks after a trauma. • The IASP criteria (also referred to as the Budapest criteria) should be used for diagnosis. • If the diagnosis is unclear, a referral letter should be completed mentioning the suspected CRPS. Recommendations for the management and referral of CRPS in emergency medicine: (page 22) • Patients should be reassured that symptoms resolve in the majority of enhanced pain cases. • There should be no difference in the functional rehabilitation of patients with or without a diagnosis of CRPS. • Patients should be advised to carefully touch, move, and use their limbs, when possible. • Rapid referral to PT or OT should be completed for early (< 4 weeks after injury) repeat attenders in the ED. • Simple analgesics should be initiated; and for unresponsive patients, neuropathic pain medication can be considered depending on local protocol. • Open communication with patients and referrals is recommended regarding concerns about the future development of CRPS. • Communication with CRPS patients should be done with care. • If CRPS is confirmed in ED, referral to pain services should be done directly or recommended to the GP in conjunction with the initiation of neuropathic pain drugs. • Established CRPS patients should be involved in the decision-making process for management plans. The use of strong opioids or benzodiazepines is not recommended in emergencies for these patients.

CRPS = chronic regional pain syndrome; ED = emergency department; GP = general practitioner; IASP = International Association for the Study of Pain; IV = intravenous; NSAID = nonsteroidal anti-inflammatory drug; OT = occupational therapist; PT = physical therapist

[a]Please note that this is a high-level summary of recommendations from chapter 7. See the hyperlink in the reference list to access the full-text version and comprehensive recommendations for pharmacological management in the emergency setting.

References

Guidelines and Recommendations

1. American College of Emergency Physicians Clinical Policies Subcommittee on Opioids, Hatten BW, Cantrill SV, et al. Clinical Policy: Critical Issues Related to Opioids in Adult Patients Presenting to the Emergency Department. *Ann Emerg Med*. 2020 09;76(3):e13-e39. Medline

2. Guidelines for the management of acute pain in emergency situations. Aartselaar (BE): European Society of Emergency Medicine; 2020. https://www.eusem.org/images/EUSEM_EPI_GUIDELINES_MARCH_2020.pdf Accessed 2021 Jan 7.
   See: Current European guidelines, p.2-3; Chapter 7: Pharmacological management of acute pain symptoms – recommendations, p. 67-77

3. Hachimi-Idrissi S, Dobias V, Hautz WE, et al. Approaching acute pain in emergency settings; European Society for Emergency Medicine (EUSEM) guidelines-part 2: management and recommendations. *Intern Emerg Med*. 2020 10;15(7):1141-1155. Medline

4. Clinical Practice Statement Should Antiemetics be Given Prophylactically with Intravenous Opioids While Treating Acute Pain in the Emergency Department? Milwaukee (WI): American Academy of Emergency Medicine; 2019. https://www.aaem.org/UserFiles/file/PostCPCAntiemetic.pdf Accessed 2021 Jan 7.
   See: Recommendation, p. 1

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6. Complex regional pain syndrome in adults UK guidelines for diagnosis, referral and management in primary and secondary care. London (GB): Royal College of Physicians; 2018. https://www.bsrm.org.uk/downloads/complex-regional-pain-syndrome-in-adults-second-edition0.pdf Accessed 2021 Jan 7.
   See: Emergency medicine, p. 18-22

Appendix 1: References of Potential Interest

Previous CADTH Reports

7. Opioid Prescribing and Pain Management: Prescription Monitoring Program Overview and the Management of Acute Low Back Pain. (*CADTH tools*); 2019. https://www.cadth.ca/tools/opioid-prescribing-and-pain-management-prescription-monitoring-program-overview-and-management Accessed 2021 Jan 7.

8. Methoxyflurane for Acute Pain in the Emergency Department: A Review of Clinical Effectiveness, Cost-Effectiveness and Guidelines. (*CADTH Rapid response report: summary with critical appraisal*); 2018. https://www.cadth.ca/sites/default/files/pdf/htis/2018/RC1006%20Methoxyflurane%20for%20Acute%20Pain%20Final.pdf Accessed 2021 Jan 7.

9. Research Gaps: Opioids for the Treatment of Pain. (*CADTH tools*); 2018. https://www.cadth.ca/tools/research-gaps-opioids-treatment-pain Accessed 2021 Jan 7.

Guidelines and Recommendations

Evidence-Based Methodology Not Specified

10. Choosing Wisely Canada. Emergency medicine. 2020 https://choosingwiselycanada.org/emergency-medicine/ Accessed 2021 Jan 7.
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11. Cohen SP, Baber ZB, Buvanendran A, et al. Pain Management Best Practices from Multispecialty Organizations During the COVID-19 Pandemic and Public Health Crises. *Pain Med*. 2020 11 07;21(7):1331-1346. Medline

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See: Appropriate Use of MRI for Hip and Knee Pain in Adults Age ≥ 40, p. 8

14. Choosing Wisely Australia. Pain Medicine. 2018. https://www.choosingwisely.org.au/recommendations/fpm Accessed 2021 Jan 7.

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See: Diagnosis and Neuroimaging in the Emergent/Urgent Setting, p. 7-8

Emergency Setting Not Specified

20. Primary Care Management of Headache Work Group. VA/DoD clinical practice guideline for the primary care management of headache. Arlington (VA): Department of Veterans Affairs, Department of Defense; 2020. https://www.healthquality.va.gov/guidelines/pain/headache/VADoDHeadacheCPGFinal508.pdf Accessed 2021 Jan 7.
See: Recommendations "Pharmacotherapy," p. 30-31

21. Health Care Guideline: Pain: Assessment, Non-Opioid Treatment Approaches and Opioid Management Care for Adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2019. https://www.icsi.org/wp-content/uploads/2019/10/Pain-Interactive-7th-V2-Ed-8.17.pdf Accessed 2021 Jan 7.
See: Recommendations Table — Annotation numbers 1, 4, 7, 11, 13.2, 13.3, 13.5, 13.6, 13.7, p. 9-15

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See: Box 2 "Summary of recommendations for opioid therapy and chronic noncancer pain," p.E662

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See: BOX 1. CDC recommendations for prescribing opioids for chronic pain outside of active cancer, palliative, and end-of-life care

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See: Section 8.11 "Acute pain management in emergency departments," p. 137-146; Section 8.13 "Discharge medication for acute pain management," p. 157-166

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