TITLE: Pulsed Radiofrequency Ablation for Chronic Pain: Clinical Effectiveness, Safety, and Guidelines

DATE: 30 June 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness and safety of pulsed radiofrequency ablation for the treatment of patients with chronic pain due to nerve entrapment?

2. What are the evidence-based guidelines regarding the use of pulsed radiofrequency ablation for the treatment of patients with chronic pain due to nerve entrapment?

3. What are the evidence-based guidelines regarding the treatment of patients with abdominal pain due to nerve entrapment?

KEY FINDINGS

No relevant literature was identified regarding pulsed radiofrequency ablation for the treatment of patients with chronic pain due to nerve entrapment. In addition, no relevant evidence-based guidelines were identified regarding the treatment of patients with abdominal pain due to nerve entrapment.

METHODS

A limited literature search was conducted on key resources including Ovid Medline, PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. For research question 3, a supplemental search was conducted on abdominal pain caused by nerve entrapment, in which a methodological filter was applied to limit retrieval to guidelines. Where possible, retrieval was limited to the human population. The searches were also limited to English language documents published between January 1, 2010 and June 24, 2015. Internet links were provided, where available.
SELECTION CRITERIA

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

<table>
<thead>
<tr>
<th>Table 1: Selection Criteria</th>
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<tr>
<td><strong>Population</strong></td>
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<tr>
<td>Q1 &amp; Q2: Patients with chronic pain due to nerve entrapment</td>
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<td>Q3: Patients with abdominal pain due to nerve entrapment (e.g., abdominal cutaneous nerve entrapment syndrome; rectus abdominis nerve entrapment syndrome)</td>
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<td><strong>Intervention</strong></td>
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<td>Pulsed radiofrequency ablation; pulsed radiofrequency; pulsed radiofrequency nerve ablation</td>
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<td><strong>Comparator</strong></td>
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<td>Other procedures used to treat chronic pain due to nerve entrapment</td>
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<td><strong>Outcomes</strong></td>
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<td>Q1: Clinical benefit (reduction in pain)</td>
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<td>Clinical harm</td>
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<td>Q2 &amp; Q3: Guidelines and recommendations</td>
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<tr>
<td><strong>Study Designs</strong></td>
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<tr>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, evidence-based guidelines</td>
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RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

No health technology assessments, systematic review, meta-analyses, randomized controlled trials, non-randomized studies, or evidence-based guidelines were identified regarding pulsed radiofrequency ablation for the treatment of patients with chronic pain due to nerve entrapment. In addition, no relevant evidence-based guidelines were identified regarding the treatment of patients with abdominal pain due to nerve entrapment.

References of potential interest are provided in the appendix.

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies
No literature identified.

Guidelines and Recommendations
No literature identified.
APPENDIX – FURTHER INFORMATION:

Health Technology Assessments – No Specific Mention of Nerve Entrapment


Systematic Reviews and Meta-Analyses – No Specific Mention of Nerve Entrapment


Randomized Controlled Trials – No Specific Mention of Nerve Entrapment


Non-Randomized Studies - No Specific Mention of Nerve Entrapment


Guidelines and Recommendations – Not Specific to Chronic Pain Due to Nerve Entrapment

Review Articles – No Specific Mention of Nerve Entrapment


Additional References
