TITLE: Computed Tomography-Guided Brachytherapy Treatment in the Operating Room: Clinical Effectiveness, Cost-Effectiveness, and Guidelines

DATE: 02 January 2014

RESEARCH QUESTIONS

1. What is the clinical effectiveness of performing computed tomography (CT)-guided brachytherapy treatment in an operating room setting?

2. What is the cost-effectiveness of providing CT-guided brachytherapy treatment in an operating room setting?

3. What are the evidence-based guidelines regarding the provision of CT-guided brachytherapy treatment in the operating room setting?

KEY MESSAGE

One non-randomized study was identified regarding the clinical effectiveness of performing CT-guided brachytherapy treatment in an operating room setting. No relevant economic evaluations or evidence-based guidelines were identified.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2013, Issue 12), University of York Centre for Reviews and Dissemination (CRD) databases, 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. The search was limited to English language documents published between January 1, 2009 and January 1, 2014.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
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, economic evaluations, and evidence-based guidelines.

One non-randomized study was identified regarding the clinical effectiveness of performing CT-guided brachytherapy treatment in an operating room setting. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, economic studies, or evidence-based guidelines were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One non-randomized study\(^1\) examined the use of mobile CT in the operating room during prostate brachytherapy to assess and correct dosing. The results of intraoperative CT assessment were similar to those of post-operative CT. The authors concluded that intraoperative dosimetric assessment with CT was feasible and could help to avoid delivery errors.

No relevant economic evaluations or evidence-based guidelines were identified.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies


Economic Evaluations
No literature identified.

Guidelines and Recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Additional References
