TITLE: Antifungal Prophylaxis for Allogeneic Hematopoietic Stem Cell Transplant Recipients: Clinical Effectiveness and Guidelines

DATE: 22 December 2016

RESEARCH QUESTIONS

1. What is the clinical effectiveness of primary antifungal prophylaxis for standard risk patients with myeloablative allogeneic hematopoietic cell transplant recipients?

2. What are the evidence-based guidelines for antifungal prophylaxis for standard risk patients with myeloablative allogeneic hematopoietic cell transplant recipients?

KEY FINDINGS

One non-randomized study was identified regarding clinical effectiveness of primary antifungal prophylaxis for standard risk patients with myeloablative allogeneic hematopoietic cell transplant recipients.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2016, 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. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, and guidelines. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2011 and December 6, 2016. Internet links were provided, where available.

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.
SELECTION CRITERIA

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

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<thead>
<tr>
<th>Table 1: Selection Criteria</th>
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<tr>
<td><strong>Population</strong></td>
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<td><strong>Intervention</strong></td>
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<td><strong>Comparator</strong></td>
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<td><strong>Outcomes</strong></td>
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<td><strong>Study Designs</strong></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.

One non-randomized study was identified regarding clinical effectiveness of primary antifungal prophylaxis for standard risk patients with myeloablative allogeneic hematopoietic cell transplant recipients. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or evidence-based guidelines were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One non-randomized study compared patients who received preventative fluconazole and those who received no prophylaxis following allogenic stem cell transplantation. Invasive fungal infections were reported with similar frequency in both patient groups. The incidence of fungal infection, three year overall and disease-free survival, non-relapse mortality and graft versus host disease were similar in both groups. The authors suggested that prophylactic fluconazole may not be required in these patients.
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


Guidelines and Recommendations
No literature identified.

PREPARED BY:
Canadian Agency for Drugs and Technologies in Health
Tel: 1-866-898-8439
www.cadth.ca
APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies

Myeloablation Not Specified in Abstract


Alternate Intervention / No Prophylaxis


Evidence-Based Guidelines – Myeloablation Not Specified

See: Health Question 1, page 12

See: Table 2, page 411

Clinical Practice Guidelines – Methodology Not Specified


Review Articles
