TITLE: Hepatitis B Vaccination for Adults: Safety and Guidelines

DATE: 16 April 2015

RESEARCH QUESTIONS

1. What is the clinical evidence regarding the safety of hepatitis B vaccination for adults?

2. What is the clinical evidence regarding the safety of hepatitis B vaccination for adult patients in dialysis units?

3. What are the evidence-based guidelines regarding who can administer hepatitis B vaccines to adults?

KEY FINDINGS

Four systematic reviews, one meta-analysis, 15 randomized controlled trials, and four non-randomized studies were identified regarding the safety of hepatitis B vaccination for adults.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2015, Issue 4), 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. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2010 and April 13, 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 1: Selection Criteria

| Population       | Q1 and 3: Any adult population (e.g., general population, acute care, etc.)  
| Q2: Adult dialysis patients |
| Intervention     | Hepatitis B vaccine |
| Comparator       | Alternate hepatitis B vaccine;  
|                  | No vaccination;  
|                  | No comparator |
| Outcomes         | Q1 and 2: Safety (e.g., patient harms, adverse events, etc.)  
|                  | Q3: Guidelines and recommendations for administration of Hepatitis B  
|                  | vaccine by health care professionals |
| Study Designs    | Health technology assessment reports, systematic reviews, meta-analyses,  
|                  | randomized controlled trials, non-randomized studies, evidence-based  
|                  | guidelines |

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.

Four systematic reviews, one meta-analysis, 15 randomized controlled trials, and four non-randomized studies were identified regarding the safety of hepatitis B vaccination for adults. No relevant health technology assessments were identified. In addition, no evidence-based guidelines were identified regarding who can administer hepatitis B vaccines to adults.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses

Adult Populations


Dialysis Patients


Randomized Controlled Trials

Adult Populations


**Dialysis Patients**


**Non-Randomized Studies**

*Adult Populations*


**Guidelines and Recommendations**
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Randomized Controlled Trials – Alternate Comparator


Guidelines and Recommendations – Unclear Methodology

   See: Context of Practice, page 5
   Scope of Practice & Scope of Employment, page 6

Review Articles

   PubMed: PM25506472