Evidence-Based Clinical Updates (EBCU’s) in Anesthesia

INSTRUCTIONS FOR AUTHORS

The Canadian Journal of Anesthesia considers for publication evidence-based clinical updates in anesthesia, perioperative medicine, pain medicine, and/or critical care medicine. Each article should address a specific question in its field. The questions chosen should be topical and clinically relevant. The Centre for Evidence Based Medicine suggests that clinical questions be focused and highlight the patient population, the intervention, the comparator (group intervention is compared to) and outcomes of interest. An evidence-based approach, using a limited number of up-to-date peer-reviewed articles, should serve as the primary source material. Please refer to the following for further information:

The Centre for Evidence Based Medicine

METHODOLOGY

- Content area to be established by potential authors, or by solicitation from the Editor-in-Chief
- A specific, answerable and clinically relevant question should be formulated upon the basis of content area
- Structured literature searches, framed around each question, are to be conducted by combining key words, as deemed appropriate by the authors (See Table I for Guidelines)
- Reference materials are to be reviewed by at least two experts in the field, and assigned a level of evidence for each citation, using the criteria of the Centre for Evidence-Based Medicine1 (Table II)
- Retrospective and observational studies should be rejected whenever data from prospective randomized clinical trials (RCT’s) are available
- Grades of Recommendation are to be applied (Table III)
- Manuscripts are to be prepared using the formatting rules listed in 3.0; and in accordance with CJA Journal requirements (check: www.springer.com/12630)
- Submitted manuscripts shall be subject to the standard peer-review process

ARTICLE FORMAT

- Article length 2000-3000 words
- 1-3 Figures
- 1-2 Tables
- 15-25 key references
STRUCTURE

- Title
- Abstract
- Clinical Question
- Methods – to include search strategy, inclusion criteria, number of citations reviewed, number of citations included, etc
- Review of current best evidence
- Conclusions (Response to Question)
- Recommendations (if any)

TABLE I
Guidelines for Literature Searching
A structured electronic literature search appropriate to the focused clinical question should be undertaken
The assistance of a reference librarian should be sought, if possible, to ensure a well designed and executed search.

- Consideration should be given to using “filters” to identify the literature most relevant to the clinical question. Both OVID and PUBMED have such filters and they are described in detail at the websites listed. In most cases the “sensitive” filter is most appropriate. Please discuss the use of these filters with your reference librarian


The search strategy, the database(s) searched, and the date of the search should be described
Two reviewers should screen the abstracts of articles found in the electronic search to identify eligible papers
The bibliographies of eligible papers should be manually reviewed to identify relevant literature not identified by the electronic search
The total number of abstracts reviewed and the number of papers included should be reported in the methods
CJA: Evidence-Based Clinical Updates
### TABLE II: Centre for Evidence-Based Medicine Levels of Evidence

When appraising an article about…

<table>
<thead>
<tr>
<th>Level</th>
<th>Therapy or Harm</th>
<th>Prognosis</th>
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<tbody>
<tr>
<td>1a</td>
<td>Systematic Review of RCT’s (with homogeneity)</td>
<td>Systematic Review (with homogeneity) of inception cohort studies Clinical decision rule validated in different populations</td>
</tr>
<tr>
<td>1b</td>
<td>Individual RCT (with narrow confidence intervals)</td>
<td>Individual inception cohort study with &gt;80% follow-up Clinical decision rule validated in a single population</td>
</tr>
<tr>
<td>1c</td>
<td>All or none study</td>
<td>All or none case series</td>
</tr>
<tr>
<td>2a</td>
<td>Systematic review of cohort studies (with homogeneity)</td>
<td>Systematic review (with homogeneity) of either retrospective cohort studies or untreated control groups in RCT’s</td>
</tr>
<tr>
<td>2b</td>
<td>Individual cohort study Poor quality RCT</td>
<td>Retrospective cohort study Follow-up of untreated control patients in an individual RCT Derivation of clinical decision rule or validated on split-sample only</td>
</tr>
<tr>
<td>2c</td>
<td>Outcomes research Ecological survey</td>
<td>Outcomes research</td>
</tr>
<tr>
<td>3a</td>
<td>Systematic review of case control studies (with homogeneity)</td>
<td></td>
</tr>
<tr>
<td>3b</td>
<td>Individual case-control study</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Case series Poor quality case-control study</td>
<td>Case-series Poor quality prognostic cohort study</td>
</tr>
<tr>
<td>5</td>
<td>Expert opinion without explicit critical appraisal, or based upon physiology, bench research or “first principles”</td>
<td>Expert opinion without critical appraisal, or based upon physiology, bench research or “first principles”</td>
</tr>
</tbody>
</table>
Adapted from: Oxford Centre for Evidence Based Medicine. Levels of evidence and Grades of Recommendation.
CJA: Evidence-Based Clinical Updates

TABLE III: Grades of Recommendation:

- Consistent Level 1 studies
- Consistent Level 2 or 3 studies
  - Extrapolations from Level 1 studies
- Level 4 studies
  - Extrapolations from Level 2 or 3 studies
- Level 5 evidence
  - Inconsistent or inconclusive studies of any level