Clinical Symposia

Methodological Issues

Chairman
Antonino Cartabellotta (Palermo, Italy)
Effectiveness of Health Interventions

- Effective
- Grey zone
- Ineffective/Harmful

CLINICAL PRACTICE

Research

Cartabello A, et al.
Ann It Med Int 1996
Hierarchy of Evidence

- Preliminary studies (animals, in vitro)
- Case-report
- Case series
- Case-control studies
- Cohort studies
- RCTs
- Systematic Reviews of RCTs (SRs of RCTs)
<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias</td>
</tr>
<tr>
<td><strong>1+</strong></td>
<td>Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias</td>
</tr>
<tr>
<td><strong>1−</strong></td>
<td>Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias</td>
</tr>
<tr>
<td><strong>2++</strong></td>
<td>High quality systematic reviews of case control or cohort studies&lt;br&gt;High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal</td>
</tr>
<tr>
<td><strong>2+</strong></td>
<td>Well-conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal</td>
</tr>
<tr>
<td><strong>2−</strong></td>
<td>Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal</td>
</tr>
<tr>
<td>3</td>
<td>Non-analytic studies, e.g. case reports, case series</td>
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<tr>
<td>4</td>
<td>Expert opinion</td>
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</tbody>
</table>

SIGN 50. August 2002
Grades of recommendations

A
At least one meta-analysis, systematic review of RCTs, or RCT rated as 1\leftrightarrow and directly applicable to the target population; or
A body of evidence consisting principally of studies rated as 1\leftrightarrow, directly applicable to the target population, and demonstrating overall consistency of results

B
A body of evidence including studies rated as 2\leftrightarrow, directly applicable to the target population, and demonstrating overall consistency of results; or
Extrapolated evidence from studies rated as 1\leftrightarrow or 1\leftrightarrow

C
A body of evidence including studies rated as 2\leftrightarrow, directly applicable to the target population and demonstrating overall consistency of results; or
Extrapolated evidence from studies rated as 2\leftrightarrow

D
Evidence level 3 or 4; or
Extrapolated evidence from studies rated as 2\leftrightarrow
Guidelines-based decision making

Knowledge-based decision making
1. Searching: pre-appraised sources

Practice Guidelines
- National Guideline Clearinghouse
- CMA Infobase
- SIGN
- Guidelines finder (UK)
- Other databases of PG
- MEDLINE

Evidence-compendia
- Clinical Evidence (issue 7, August 2002)

Systematic reviews
- Cochrane Library (issue 4, 2002)
- MEDLINE
1. Searching: primary studies

Randomized Controlled Trials
Observational studies

- MEDLINE
- Best-Evidence 5
2. Critical Appraisal

*Users’ Guide to Biomedical Literature*

*JAMA 1993-2000*

**AGREE Instrument**
*(Final version, September 2001)*

www.agreecollaboration.org
Clinical Symposia Format

• Presentation of clinical scenario and relevant questions 10’
• Remote control vote 5’
• Evidence-based data presentation 15’
• Comments of experts on topic-answers provided by the audience and on grey zones and clinical applicability of evidence 15’
• Open discussion and final remarks 15’
The Electronic Library is free available at:

www.gimbe.org/eventi/ame_aace