TITLE: Anti-Thyroid Peroxidase Antibodies in the General Population: Clinical Effectiveness and Guidelines

DATE: 20 April 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness of measuring anti-thyroid peroxidase antibodies in the general population?

2. What are the evidence-based guidelines for the measurement of anti-thyroid peroxidase antibodies in the general population?

KEY FINDINGS

One evidence-based guideline was identified regarding the measurement of anti-thyroid peroxidase antibodies in the general population.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2015, Issue 3), 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, and guidelines. 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 7, 2015. 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.

<table>
<thead>
<tr>
<th>Selection Criteria</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 1: Selection Criteria</strong></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>General population</td>
</tr>
<tr>
<td>Intervention</td>
<td>Measurement of anti-thyroid peroxidase antibodies</td>
</tr>
<tr>
<td>Comparator</td>
<td>No measurement of anti-thyroid peroxidase antibodies</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Clinical effectiveness (benefits [diagnosis of pathogenesis; change in patient management]; harms [detection of positive titer when no disease present, false positives; over-diagnosis])</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, evidence-based guidelines</td>
</tr>
</tbody>
</table>

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 and evidence-based guidelines.

One evidence-based guideline was identified regarding the measurement of anti-thyroid peroxidase antibodies in the general population. No relevant health technology assessments, systematic reviews, meta-analyses, or randomized controlled trials were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One evidence-based guideline was identified regarding the measurement of anti-thyroid peroxidase antibodies in the general population.

The European Thyroid Association guideline for the management of subclinical hypothyroidism recommends that for thyroid antibody testing, initially raised serum thyroid stimulating hormone (TSH) with free T4 values should be investigated with repeat measurement after two to three months.
REFERENCES SUMMARY

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Guidelines and Recommendations

See: Recommendations, pages 217-218

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

Non-Randomized Studies


