TITLE: Thyroid Ultrasound to Evaluate Thyroid Function: Clinical Effectiveness and Guidelines

DATE: 17 April 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness of thyroid ultrasound to evaluate thyroid function in patients with no palpable abnormality of the thyroid gland?

2. What are the evidence-based guidelines regarding the use of thyroid ultrasound to evaluate thyroid function in patients with no palpable abnormality of the thyroid gland?

KEY FINDINGS

No relevant literature was identified regarding the use of thyroid ultrasound to evaluate thyroid function in patients with no palpable abnormality of the thyroid gland.

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. 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 6, 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**

<table>
<thead>
<tr>
<th>Population</th>
<th>Patients with abnormal thyroid function with no palpable abnormality of the thyroid gland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Ultrasound</td>
</tr>
<tr>
<td>Comparator</td>
<td>No ultrasound</td>
</tr>
<tr>
<td></td>
<td>Thyroid scan</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Clinical effectiveness (benefits [e.g. evaluation of function] and harms [e.g. over-diagnosis of nodules])</td>
</tr>
<tr>
<td></td>
<td>Guidelines</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.

No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or evidence-based guidelines were identified regarding the use of thyroid ultrasound to evaluate thyroid function in patients with no palpable abnormality of the thyroid gland.

References of potential interest are provided in the appendix.

**OVERALL SUMMARY OF FINDINGS**

No relevant literature was identified regarding the use of thyroid ultrasound to evaluate thyroid function in patients with no palpable abnormality of the thyroid gland; therefore, no summary can be provided.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Guidelines and Recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies


Guidelines and Recommendations – Unclear Methodology

See: Endocrine, pages 373-375

Guidelines and Recommendations – Indication of Interest Unspecified