

iCAHE JC Critical Appraisal Summary

Journal Club Details

Journal Club location Lyell McEwin Hospital
JC Facilitator Lauren Hammond
JC Discipline Speech Pathology

Question

NA

Review Question/PICO/PACO

P: N/A

I: N/A

C: N/A

O: N/A

Article/Paper

Lagarde ML, Kamalski DM, Van Den Engel-Hoek LE. The reliability and validity of cervical auscultation in the diagnosis of dysphagia: A systematic review. Clinical rehabilitation. 2016 Feb;30(2):199-207.

Please note: due to copyright regulations CAHE is unable to supply a copy of the critically appraised paper/article. If you are an employee of the South Australian government you can obtain a copy of articles from the [DOHSA librarian](#).

Article Methodology: Systematic Review



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Ques No.	Yes	Can't Tell/NA	No	Comments
1	✓			<p>Did the review address a clearly focused question?</p> <p>The aim of this systematic review is to provide a critical overview of the studies that have assessed the reliability and validity of cervical auscultation in evaluating the pharyngeal phase of swallowing to diagnose the aspects of dysphagia in patients who suffer from dysphagia</p>
2	✓			<p>Did the authors look for the appropriate sort of papers?</p> <p>Medline, Embase and The Cochrane Library were searched until December 2014 for the domain <i>dysphagia</i>, the determinant <i>cervical auscultation</i> and synonyms of these terms.</p> <p>Search Terms (sourced from supplementary documents): (Dysphagia OR swallowing disorder OR swallowing disorders OR deglutition disorders OR deglutition disorder OR swallowing difficulties OR swallowing difficulty OR feeding problems OR swallowing problems)</p> <p>AND</p> <p>(Cervical auscultation OR auscultation OR swallowing sounds OR swallowing sound OR swallow-associated sounds OR swallow-associated sound OR swallow-related respiration OR swallowing-related respiration)</p> <p>Is it worth continuing? YES</p>
3	✓			<p>Do you think the important, relevant studies were included?</p> <p>Inclusion and Exclusion criteria</p> <ul style="list-style-type: none"> Types of participants: All studies aimed at patients with dysphagia are included. No particular age, particular pathology or specific type of dysphagia was excluded. Type of measurement: The measurement were done with an original stethoscope or an electric stethoscope. Measurements with an accelerometer were excluded. Types of outcome measures: Studies that describe the reliability or validity of cervical auscultation. Types of studies: Diagnostic accuracy studies/ cross-sectional studies Publication language and date: Published in English and Dutch until December 2014.
4	✓			<p>Did the review's authors do enough to assess the quality of the included studies?</p> <p>The methodological quality of each of the studies was evaluated independently by two researchers, and consensus for any discrepancies was reached through discussion. The studies were evaluated using the Dutch 'Cochrane checklist for diagnostic accuracy studies'. This assessment tool for diagnostic accuracy tests consists of six questions that are relevant for determining the methodological quality. The six questions were answered with 'yes', 'no' or 'not stated'. Articles with a total quality score of 6 'yes answers' were considered to be of good quality, articles with a score of 4–5 were considered of moderate quality and articles with a score below 4 were considered to be of poor methodological quality and were excluded for evaluating the results</p>

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5		✓	<p>If the results of the review have been combined, was it reasonable to do so?</p> <p>Results of the studies were not combined. Given the included studies, this was an acceptable choice.</p>
6			<p>What are the overall results of the reviews?</p> <p>A total of 90 articles were identified through the search strategy, and after applying the inclusion and exclusion criteria, six articles were included in this review. In the six studies, 197 patients were assessed with cervical auscultation. Two of the six articles were considered to be of ‘good’ quality and three studies were of ‘moderate’ quality. One article was excluded because of a ‘poor’ methodological quality. Sensitivity ranges from 23%–94% and specificity ranges from 50%–74%. Inter-rater reliability was ‘poor’ or ‘fair’ in all studies. The intra-rater reliability shows a wide variance among speech language therapists. In this systematic review, conflicting evidence is found for the validity of cervical auscultation. The reliability of cervical auscultation is insufficient when used as a stand-alone tool in the diagnosis of dysphagia in adults. There is no available evidence for the validity and reliability of cervical auscultation in children. Cervical auscultation should not be used as a stand-alone instrument to diagnose dysphagia.</p>
7			<p>How precise are the results?</p> <p>P values and 95% Confidence Intervals were not reported, however given the focus of the article and the included studies, this is appropriate.</p>
8	Journal Club to discuss		<p>Can the results be applied to the local population?</p> <p>CONTEXT ASSESSMENT (please refer to attached document)</p> <ul style="list-style-type: none"> – Infrastructure – Available workforce (? Need for substitute workforce?) – Patient characteristics – Training and upskilling, accreditation, recognition – Ready access to information sources – Legislative, financial & systems support – Health service system, referral processes and decision-makers – Communication – Best ways of presenting information to different end-users – Availability of relevant equipment – Cultural acceptability of recommendations <p>Others</p>
9			<p>Were all important outcomes considered?</p>
10			<p>Are the benefits worth the harms and costs?</p>
11			<p>What do the study findings mean to practice (i.e. clinical practice, systems or processes)?</p>
12			<p>What are your next steps?</p> <p>ADOPT, CONTEXTUALISE, ADAPT</p> <p>And then (e.g. evaluate clinical practice against evidence-based recommendations; organise the next four journal club meetings around this topic to build the evidence base; organize training for staff, etc.)</p>

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