

## iCAHE JC Critical Appraisal Summary

### Journal Club Details

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Journal Club location	Flinders Medical Centre
JC Facilitator	Pamela Hewavasam
JC Discipline	Speech Pathology

### Question

N/A

### Review Question/PICO/PACO

P N/A

I N/A

C N/A

O N/A

### Article/Paper

Park, J.S., Oh, D.H., Chang, M.Y. and Kim, K.M., 2016. Effects of expiratory muscle strength training on oropharyngeal dysphagia in subacute stroke patients: a randomised controlled trial. *Journal of oral rehabilitation*, 43(5), pp.364-372.

*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: Randomized Controlled Trial

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Ques No.	Yes	Can't Tell	No	Comments
1	✓			<b>Did the trial address a clearly focused issue?</b> This study was performed to investigate the effects of EMST on the activity of suprahyoid muscles, aspiration and dietary stages in stroke patients with dysphagia.
2	✓			<b>Was the assignment of patients to treatments randomised?</b> In total, 33 patients were randomly divided into two groups, using randomly selected envelopes containing a code specifying the group. This study was designed as a 4-week, single-blind, randomised, controlled study.
3	✓			<b>Were all of the patients who entered the trial properly accounted for at its conclusion?</b> All participants were accounted for at study conclusion; of the 37 patients assessed for eligibility, 34 were randomized into the two groups, with 17 enrolled in the experimental group and 16 enrolled in the placebo group. A total of 6 participants were lost to follow-up (3 in each group) with reasoning provided, leaving a total of 27 participants data for analysis. <b>Is it worth continuing? YES</b>
4			✓	<b>Were patients, health workers and study personnel 'blind' to treatment?</b> This was RCT was a single-blind study, in which participants were blinded to study group but some study personnel were not blinded. Evaluations related to VFSS were completed prior to and following intervention by an experienced physician blinded to the subjects' group allocation. Evaluations related to sEMG were not blinded to group allocations due to manpower constraints.
5	✓			<b>Were the groups similar at the start of the trial?</b> There were no statistically significant differences between groups at the start of the trial
6		✓		<b>Aside from the experimental intervention, were the groups treated equally?</b> Whether patients were undergoing other interventions/therapies/treatments that could impact the outcome of this study were not examined or discussed.
7				<b>What are the results?</b> The experimental group exhibited improved suprahyoid muscle group activity and PAS results, when compared to the placebo group. This study confirms EMST as an effective treatment for the development of suprahyoid muscle activity in stroke patients with dysphagia. Additionally, improvements in aspiration and penetration outcomes were observed. <b>How large was the treatment effect?</b> Following intervention, statistical analysis indicated significant differences in measured suprahyoid muscle activity (P = 0.01), liquid PAS outcomes (P = 0.03) and FOIS results (P = 0.06), but not semisolid type PAS outcomes (P = 0.32), between the groups.
8				<b>How precise was the estimate of the treatment effect?</b>

9	Journal Club to discuss	<p><b>Can the results be applied to the local population?</b></p> <p><b>CONTEXT ASSESSMENT (please refer to attached document)</b></p> <ul style="list-style-type: none"> <li>- Infrastructure</li> <li>- Available workforce (? Need for substitute workforce?)</li> <li>- Patient characteristics</li> <li>- Training and upskilling, accreditation, recognition</li> <li>- Ready access to information sources</li> <li>- Legislative, financial &amp; systems support</li> <li>- Health service system, referral processes and decision-makers</li> <li>- Communication</li> <li>- Best ways of presenting information to different end-users</li> <li>- Availability of relevant equipment</li> <li>- Cultural acceptability of recommendations</li> <li>- Others</li> </ul>
10		<b>Were all important outcomes considered?</b>
11		<b>Are the benefits worth the harms and costs?</b>
12		<b>What do the study findings mean to practice (i.e. clinical practice, systems or processes)?</b>
13		<p><b>What are your next steps?</b></p> <p><b>ADOPT, CONTEXTUALISE, ADAPT</b></p> <p><b>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.)</b></p>
14		<b>What is required to implement these next steps?</b>

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