



## iCAHE JC Critical Appraisal Summary

### Journal Club Details

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<b>Journal club location:</b>	FMC
<b>Journal club Facilitator:</b>	Ella T
<b>Journal club Discipline:</b>	Speech Pathology

### Article/Paper

Love, AL, Cornwell, PL & Whitehouse, SL 2013, 'Oropharyngeal dysphagia in an elderly post-operative hip fracture population: a prospective cohort study', *Age and Ageing*, vol. 42, pp. 782–785.

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<b>Article Methodology:</b>	Prospective Cohort
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Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p><b>Did the study address a clearly focused issue?</b></p> <p>The aim of the study was to investigate the presence of oropharyngeal dysphagia (OD) following hip fracture surgery in the older population. Additionally, preadmission, intra-operative and post-operative factors that may be associated with OD post-surgery were investigated.</p>
2	✓			<p><b>Did the authors use an appropriate method to answer their question?</b></p> <p>The study used a prospective cohort design. In a prospective cohort study, a group of individuals with common characteristics are assembled and followed over time. As such, this type of design is appropriate to address the aims of the current study.</p> <p><b>Is it worth continuing? YES</b></p>
3	✓			<p><b>Was the cohort recruited in an acceptable way?</b></p> <p>Patients admitted consecutively to a specialised orthogeriatric unit within a metropolitan hospital over a 9-month period were considered for inclusion (n = 199). Patients aged 65 and over, admitted for hip fracture surgery irrespective of previous medical co-morbidities associated with dysphagia (e.g. neurological co-morbidities), were eligible for inclusion to ensure the cohort was representative of the presenting clinical population.</p> <p>This project was approved by the local hospital ethics committee HREC/11/QPCH/9.</p>
4	✓			<p><b>Was the exposure accurately measured to minimize bias?</b></p> <p>A clinical swallowing assessment was conducted by a speech pathologist within 72 h of surgery following medical approval for oral intake to document the presence of OD.</p> <p>The assessment included case history taking, and a clinical swallowing examination (CSE). The pre-operative OD status was based on information provided by the patient, family or residential aged care facility (RACF) through a structured interview including information about previous swallowing function (e.g. coughing/choking at meals) and food texture and fluids consumed prior to admission. Australian national standards for texture-modified diets and fluids were used to guide this questioning. The CSE consisted of an examination of the oral musculature, perceptual evaluation of voice quality and a series of oral food and fluid trials consistent with the Australian Standards for Texture Modified Food and Fluids.</p> <p>OD was considered present when clinical signs of reduced swallowing efficacy or reduced swallowing safety were observed by the speech pathologist.</p>



5		✓	<p><b>Was the outcome accurately measured to minimize bias?</b></p> <p>The validity and reliability of the measurements used was not reported.</p>
6		✓	<p><b>Have the authors identified all important confounding factors? Have they taken account of the confounding factors in the design and/or analysis?</b></p> <p>A Confounder is a variable whose presence affects the variables being studied so that the results do not reflect the actual relationship. To exclude or control for these randomisation and matching can be used – in the current study it has not. When this is not possible statistical methods can be used to adjust for potentially confounding effects.</p> <p>In the current study there were multiple statistical analyses performed outlined in the methods (p 783), however confounders have not been explicitly outlined in this article write-up.</p>
7		✓	<p><b>Was the follow up of subjects complete enough?</b></p> <p>It seems that the patient data was only collected while they were in hospital following surgery (ie. follow-up did not continue after this).</p>
8			<p><b>What are the results of this study?</b></p> <p><i>Bottom line results:</i> OD was found to be present post-operatively in 34% (n = 61) of the current population. Multivariate logistic regression analyses revealed the presence of pre-existing neurological and respiratory medical co-morbidities, presence of post-operative delirium, age and living in a residential aged care facility prior to hospital admission to be associated with the postoperative OD.</p>
9			<p><b>How precise are the results?</b></p> <p>Precision of the results (i.e. treatment effect) is determined based on the confidence intervals; most often the 95% confidence interval is used. Confidence interval describes the uncertainty inherent in the effect estimate, and is the range within which one can be 95% certain that the true average treatment effect actually lies. If the confidence interval is relatively narrow (e.g. 0.70 to 0.80), the effect size is known precisely. If the interval is wider (e.g. 0.60 to 0.93) the uncertainty is greater, although there may still be enough precision to make decisions about the utility of the intervention.</p>
10	Discuss this in your Journal Club		<p><b>Do you believe the results?</b></p>
11			<p><b>Can the results be applied to the local population?</b></p>



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12	Do the results of this study fit with other available evidence?
10	What do the study findings mean to practice (i.e. clinical practice, systems or processes)?
11	What are your next steps? (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.)
12	What is required to implement these next steps?