

iCAHE JC Critical Appraisal Summary

Journal Club Details

Journal Club location	NARS
JC Facilitator	Josie Kemp
JC Discipline	Speech Pathology

Question

Review Question/PICO/PACO

- P** People who experience altered/diminished/absent facial sensation post stroke
- I** Facial sensation retraining
- C** No intervention
- O** Improved or regained facial sensation

Article/Paper

Phillips C, Kim SH, Tucker M, Turvey TA. Sensory retraining: burden in daily life related to altered sensation after orthognathic surgery, a randomized clinical trial. Orthodontics & craniofacial research. 2010 Aug;13(3):169-78.

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

Click [here](#) to access critical appraisal tool



University of
South Australia

International Centre for
Allied Health Evidence

iCAHE

A member of the Sansom Institute

CONTACTS

www.unisa.edu.au/cahe
 iCAHE@unisa.edu.au
 Telephone: +61 8 830 22099
 Fax: +61 8 830 22853

University of South Australia
 GPO Box 2471
 Adelaide SA 5001
 Australia

CRICOS Provider Number
 00121B



University of
 South Australia

International Centre for
 Allied Health Evidence

iCAHE

A member of the Sansom Institute

Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>Did the trial address a clearly focused issue?</p> <p>Assess the long-term effect of sensory retraining exercises, age, gender, type of surgery, and pre-surgical psychological distress on patients perception of the interference related to altered sensation 2 years after orthognathic surgery.</p> <p>To assess whether sensory retraining exercises, performed only for the first 6 months after surgery, have a long-term effect on patient self-report of daily life interference related to altered sensation and second, to assess whether age, gender, the type of surgery, or pre-surgical psychological distress may affect patients perception of daily life interference long term.</p>
2	✓			<p>Was the assignment of patients to treatments randomised?</p> <p>Subjects were recruited from the Oral and Maxillofacial Surgery Clinic at the University of North Carolina at Chapel Hill (UNC) or from University Oral Maxillofacial Surgery in Charlotte, NC, a community-based practice. Consecutive patients, age 13–50, who were scheduled for a bilateral sagittal split osteotomy alone or with LeFort I osteotomy to correct a severe malocclusion and/or a developmental disharmony between December 2001 and April 2005 were enrolled in a multicenter, double blind, two-arm parallel group, stratified block randomized controlled clinical trial.</p>
3		✓		<p>Were all of the patients who entered the trial properly accounted for at its conclusion?</p> <p>While this study represents a follow-up study across several years, there is no detail regarding drop out from the study – if participants were unavailable to follow-up, this has not been discussed. However, this study appears to be separated into more than one publication (Phillips C, Essick G, Preisser JS, Turvey TA, Tucker M, Lin D. Sensory Retraining following orthognathic surgery: effect on patient perception of altered sensation. J Oral Maxillofac Surg 2007;65:1162–73.) and these details may have been in the separate publication. However, within this publication, these details are not explored.</p> <p>Is it worth continuing? YES</p>
4		✓		<p>Were patients, health workers and study personnel 'blind' to treatment?</p> <p>The blinding of patients, health workers, and study personnel was not discussed within this publication, however as previously mentioned these details may have been reported in the secondary publication associated with this study.</p>
5	✓			<p>Were the groups similar at the start of the trial?</p> <p>The subjects were young adults ($x = 25.1$ years, $SD = 11.9$). The majority were women (71%) and almost all (93%) were Caucasian. Sixty-one percent had a BSSO only, and 30% had a genioplasty. As expected, based on randomization, the percent of subjects who had a BSSO only or a genioplasty were very similar for the two exercise groups ($p > 0.22$). The two exercise groups were also similar in terms of average age and percentages of women and Caucasians ($p > 0.58$). Details of the pre-surgery comparisons of the exercise groups and the two centers were presented in the secondary publication for this study.</p>

CONTACTS

www.unisa.edu.au/cahe
 iCAHE@unisa.edu.au
 Telephone: +61 8 830 22099
 Fax: +61 8 830 22853

University of South Australia
 GPO Box 2471
 Adelaide SA 5001
 Australia

CRICOS Provider Number
 00121B



University of
 South Australia

International Centre for
 Allied Health Evidence
 iCAHE

6		✓	<p>Aside from the experimental intervention, were the groups treated equally?</p> <p>It does appear that other than the experimental intervention that the groups were treated equally, however the details of this were not explored in detail. This may have been addressed in more detail in the associated secondary publication with this study.</p>
7			<p>What are the results? How large was the treatment effect?</p> <p>Up to 2 years after surgery, the opening exercise only group had a higher likelihood of reporting interference in daily activities related to numbness and loss of lip sensitivity than the sensory retraining exercise group. The difference between the two groups was relatively constant. Older subjects and those with elevated psychological distress before surgery reported higher burdens related to unusual facial feelings, numbness, and loss of lip sensitivity ($p < 0.02$). The positive effect of sensory retraining facial exercises observed after surgery is maintained over time. Clinicians should consider the patient's age and psychological well-being prior to providing pre-surgical counseling regarding the impact on daily life of persistent altered sensation following a mandibular osteotomy.</p>
8			<p>How precise was the estimate of the treatment effect?</p> <p>P values and 95% confidence intervals are reported.</p>
9	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 - Others
10			<p>Were all important outcomes considered?</p>
11			<p>Are the benefits worth the harms and costs?</p>
12			<p>What do the study findings mean to practice (i.e. clinical practice, systems or processes)?</p>
13			<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>
14	<p>What is required to implement these next steps?</p>		

International Centre for Allied Health Evidence (iCAHE)

CONTACTS

www.unisa.edu.au/cahe

iCAHE@unisa.edu.au

Telephone: +61 8 830 22099

Fax: +61 8 830 22853

University of South Australia
GPO Box 2471
Adelaide SA 5001
Australia

CRICOS Provider Number
00121B



University of
South Australia

International Centre for
Allied Health Evidence

iCAHE

A member of the Sansom Institute

The International Centre for Allied Health Evidence (iCAHE)
For more information on CAHE Journal Clubs email iCAHEjournalclub@unisa.edu.au
To receive CAHE updates register online at www.unisa.edu.au/cahe