

## iCAHE JC Critical Appraisal Summary

### Journal Club Details

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Date of submission	2010
Journal Club location	FMC Speech
JC Facilitator	Jordana Maio
JC Discipline	Speech Pathology

### Review Question/PICO/PACO

- P Adults within a year of laryngectomy with hypopharyngeal stenosis
- I Any intervention i.e- surgical flaps
- C Dialatation (current practice at FMC)
- O Reduction in prevalence of hypopharyngeal stenosis

### Article/Paper

Suzuki M, Tsunoda A, Shirakura S, Sumi T, Nishijima W & Kishimoto S (2010) A novel permanent tracheostomy technique for prevention of stomal stenosis (triangular tracheostomy), *Auris Nasus Larynx*, 37: 465-468.

*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:	Case control
Returned JC on:	2010
By CAHE staff member:	Olivia Thorpe



CONTACTS

www.unisa.edu.au/cahe  
 karen.grimmer-somers  
 @unisa.edu.au  
 Telephone (08) 8302 2769  
 Facsimile (08) 8302 2766

University of South Australia  
 GPO Box 2471  
 Adelaide SA 5001  
 Australia

CRICOS Provider Number  
 001218



iCAHE

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Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p><b>Did the study address a clearly focussed issue?</b></p> <p>The study asked a clearly focussed question.</p> <p><i>Population:</i> patients who underwent total laryngectomy at the Gunma Prefectural Cancer Center and the Saitama Prefectural Cancer Center were enrolled in this study</p> <p><i>Intervention:</i> patients received either conventional permanent tracheostomy or the new technique- the triangular method.</p> <p><i>Outcome:</i> occurrence of stomal stenosis</p>
2	✓			<p><b>Was appropriate method used?</b></p> <p>A randomised controlled trial would have been preferable as it eliminates bias in the methodology. However, the study question was still addressed by using a retrospective case control approach.</p> <p>Is it worth continuing? YES</p>
3		✓		<p><b>Were cases recruited in an acceptable manner?</b></p> <p>Patients were recruited and enrolled for this study from April 2003 to March 2009 from the Gunma Prefectural Cancer Center and the Saitama Prefectural Cancer Center. It was not clear however, how they were exactly recruited. No power calculation was carried out to determine the adequate number of patients.</p>
4		✓		<p><b>Were the controls selected in an acceptable way?</b></p> <p>The controls were selected based on the date of surgery but no other selection criteria were reported.</p>
5	✓			<p><b>Was the exposure accurately measured to minimize bias?</b></p> <p>The intervention (surgical technique) was clearly described using step by step instructions and pictures. The first author performed all the surgery as a surgeon or trainer.</p>
6				<p><b>What confounding factors have the authors accounted for? Have they taken these into account for the design and/or analysis?</b></p> <p>The authors have recognized that factors relating to stomal stenosis are reported, including stomal recurrence, surgical site infection, and skill of the surgeon. Since women have smaller tracheas than men, gender is also reported as a factor influencing stomal stenosis. Saying this, the authors concluded that this had no effect on their results.</p>

7				<p><b>What are the results?</b></p> <p><u>Bottom line result:</u> Neither stomal recurrence nor patient discomfort was noted with the triangular technique. Tracheostomal stenosis was not encountered despite complications such as surgical site infection. The triangular technique can be considered a straightforward, safe, and effective strategy for prevention of tracheostomal stenosis.</p>
8				<p><b>How precise are the results?</b></p> <p>The results have shown statistically different outcomes between the two surgical options. Fisher's exact probability test was used for statistical analysis and p less than 0.05 was defined as statistically significant.</p>
9				<p><b>Do you believe the results?</b></p> <p>Journal club to discuss.</p>
10				<p><b>Can results be applied to the local population?</b></p> <p>Journal club to answer.</p>

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