

Address:
 Luke Daniel Williamson
 Intensive Care Unit
 Epworth Richmond Hospital
 89 Bridge Road Richmond
 Melbourne, Vic. 3121
 Australia
 e-mail: lukas.williamson@gmail.com

A novel template for reporting pre-hospital major incident medical management

doi: 10.1111/aas.12364

Sir,

The Centre for Research on the Epidemiology of Disasters provides yearly reports on the impact of disasters worldwide.¹ In 2013, they depicted 16 incidents that affected more than 26 million people and inflicted over 8000 deaths.

All major incidents have the potential to carry lessons that may enable others to prepare better and thus mitigate the impact of new incidents. Such lessons should be disseminated through an openly accessible source to systematic information. Currently anecdotal case reports are the most common way of sharing experiences.²⁻⁵ More systematic reporting of field experiences has been advocated,^{6,7} and several templates and guidelines for such reporting have previously been designed.^{8,9}

A systematic review of the literature identified 10 forms of systematic reporting, some of which were templates, from the pre-hospital medical management of major incidents. The templates had only been used on a limited scale, and none had been tested for feasibility.¹⁰ Consequently, an international research group of previous template authors and other experts within the field cooperated to develop a novel consensus-based template for such reporting aiming at rapid dissemination of experience from past incidents.

The novel template consists of 48 variables in six categories: pre-incident data, emergency medical service background, incident characteristics, emergency medical response, patient characteristics and key lessons.¹¹ The template is freely available and can be downloaded from <http://www.majorincidentreporting.org>. Reporting and access to already deposited reports is free. The initiative supports open access publication¹² and accessible information following major incidents.¹³

Following implementation of the reporting template, it will be tested for feasibility. Efforts are also being made to implement the template in both national health institutions as well as the World Health Organisation to encourage that reports are submitted, and data are utilised on a global scale. Scientific journals are encouraged to embed the template in their editorial policies and author instructions.

Acta Anaesthesiologica Scandinavica has a long and proud tradition of publishing consensus-based guidelines intended to support fellow practitioners in performing evidence-based, state-of-the-art anaesthesia, critical care and pain management.^{5,14-18} The novel template seeks to contribute to the improved survival and on-scene safety for both the victims and rescue personnel, and to an optimal use of resources in such incidents. Dissemination of experiences gained through dangers and hardship can be viewed as an ethical imperative for practi-

tioners.¹⁹ We encourage all our colleagues, as an act of solidarity towards fellow health-care professionals, to actively contribute to the systematic reporting after major incidents. Together we can create a database with freely accessible reports and disseminate information necessary for improving the pre-hospital response to major incidents. After all, there is no need to re-learn all the hard-learned lessons that undoubtedly must exist after all the major incidents that have occurred.

Conflicts of interest: We declare to have no conflict of interest.

S. Fattah
 M. Rehn
 T. Wisborg

References

1. Guha-Sapir D, Hoyois P, Below R. Annual disaster statistical review 2012: the numbers and trends. Brussels: Centre for Research on the Epidemiology of Disasters, 2013.
2. Kuisma M, Hiltunen T, Määttä T, Puolakka J, Boyd J, Nousila-Wiik M, Hakala T. Analysis of multiple casualty incidents – a prospective cohort study. *Acta Anaesthesiol Scand* 2005; 49: 1527–33.
3. Vainiopää T, Peräjoki K, Hiltunen K, Porthan K, Taskinen A, Boyd J, Kuisma M. Integrated model for providing tactical emergency medicine support (TEMS): analysis of 120 tactical situations. *Acta Anaesthesiol Scand* 2012; 56: 158–63.
4. Charuluxananan S, Bunburaphong P, Tuchinda L, Vorapaluk P, Kyokong O. Anesthesia for Indian Ocean tsunami-affected patients at a southern Thailand provincial hospital. *Acta Anaesthesiol Scand* 2006; 50: 320–3.
5. Jensen G, Callesen T, Hagemo JS, Hreinsson K, Lund V, Nordmark J. Scandinavian clinical practical guidelines on general anaesthesia for emergency situations. *Acta Anaesthesiol Scand* 2010; 54: 922–50.
6. Bradt DA, Aitken P. Disaster medicine reporting: the need for new guidelines and the CONFIDE statement. *Emerg Med Australas* 2010; 22: 483–7.
7. Lockey DJ. The shootings in Oslo and Utoya island July 22, 2011: lessons for the International EMS community. *Scand J Trauma Resusc Emerg Med* 2012; 26: 4.
8. Sundnes KO. Health disaster management: guidelines for evaluation and research in the Utstein style: executive summary. *Task Force on Quality Control of Disaster Management. Prehosp Disaster Med* 1999; 14: 43–52.
9. Debacker M, Hubloue I, Dhondt E, Rockenschaub G, Ruter A, Codreanu T, Koenig KL, Schultz C, Peleg K, Halpern P, Stratton S, Della Corte F, Deloos H, Ingrassia PL, Colombo D, Castrèn M. Utstein-style template for uniform data reporting of acute medical response in disasters. *PLoS Curr* 2012; 4: e4f6cf3e8df15a.
10. Fattah S, Rehn M, Reiherth E, Wisborg T. Systematic literature review of templates for reporting prehospital major incident medical management. *BMJ Open* 2013; 3: e002658.
11. Fattah S, Rehn M, Thompson J, Lossius HM, Lockey D, Wisborg T. A consensus based template for reporting of pre-hospital major incident medical management. *Scand J Trauma Resusc Emerg Med* 2014; 22: 5.
12. Matheka DM, Nderitu J, Mutonga D, Otiti MI, Siegel K, Demayo AR. Open access: academic publishing and its implications for knowledge equity in Kenya. *Global Health* 2014; 10: 26.
13. Clarke M. Evidence Aid – from the Asian tsunami to the Wenchuan earthquake. *J Evid Based Med* 2008; 1: 9–11.
14. Søreide E, Eriksson LI, Hirlekar G, Eriksson H, Henneberg SW, Sandin R, Raeder J, Task Force on Scandinavian Preoperative Fasting Guidelines, Clinical Practice Committee

- Scandinavian Society of Anaesthesiology and Intensive Care Medicine. Pre-operative fasting guidelines: an update. *Acta Anaesthesiol Scand* 2005; 49: 1041–7.
15. Berlac P, Hyldmo PK, Kongstad P, Kurola J, Nakstad AR, Sandberg M. Pre-hospital airway management: guidelines from a task force from the Scandinavian Society for Anaesthesiology and Intensive Care Medicine. *Acta Anaesthesiol Scand* 2008; 52: 897–907.
 16. Castren M, Silfvast T, Rubertsson S, Niskanen M, Valsson F, Wanscher M, Sunde K, Task Force on Scandinavian Therapeutic Hypothermia Guidelines, Clinical Practice Committee Scandinavian Society of Anaesthesiology and Intensive Care Medicine. Scandinavian clinical practice guidelines for therapeutic hypothermia and post-resuscitation care after cardiac arrest. *Acta Anaesthesiol Scand* 2009; 53: 280–8.
 17. Breivik H, Bang U, Jalonen J, Vigfusson G, Alahuhta S, Lagerkranser MH. Nordic guidelines for neuraxial blocks in disturbed haemostasis from the Scandinavian Society of Anaesthesiology and Intensive Care Medicine. *Acta Anaesthesiol Scand* 2010; 54: 16–41.
 18. Kroigaard M, Garvey LH, Gillberg L, Johansson SGO, Mosbech H, Florvaag E, Harboe T, Eriksson LI, Dahlgren G, Seeman-Lodding H, Takala R, Wattwil M, Hirlekar G, Dahlén B, Guttormsen AB. Scandinavian Clinical Practice Guidelines on the diagnosis, management and follow-up of anaphylaxis during anaesthesia. *Acta Anaesthesiol Scand* 2007; 51: 655–70.
 19. Pahlman I, Tohmo H, Gylling H. Pandemic influenza: human rights, ethics and duty to treat. *Acta Anaesthesiol Scand* 2010; 54: 9–15.

Address:
 Sabina Fattah
 Norwegian Air Ambulance Foundation
 Department of Research and Development
 PO box 94
 1441 Drøbak
 Norway
 e-mail: sabina.fattah@norskluftambulanse.no

Lingual tonsil hypertrophy diagnosed by post-mortem computed tomography in a difficult airway case

doi: 10.1111/aas.12388

Sir,

Lingual tonsil hypertrophy is found in many people, and it is usually asymptomatic.¹ Jones and Cohle^{2,3} reported a case of unanticipated difficult airway caused by lingual tonsillar hyperplasia that caused a 'cannot ventilate cannot intubate (CVCI)' and led to death. We experienced a case of unanticipated CVCI in the emergency room (ER) and evaluated the airway with post-mortem computed tomography (PMCT).

A 51-year-old female patient was taken to the ER by ambulance. On the arrival of the emergency medical team, she had cardiopulmonary arrest, and cardiac life support was initiated. Approximately 5 min after the ER resuscitation, recovery of spontaneous circulation was obtained. Mask ventilation was impossible despite insertion of a nasal airway. The chief ER physician attempted oro-tracheal intubation; however, direct

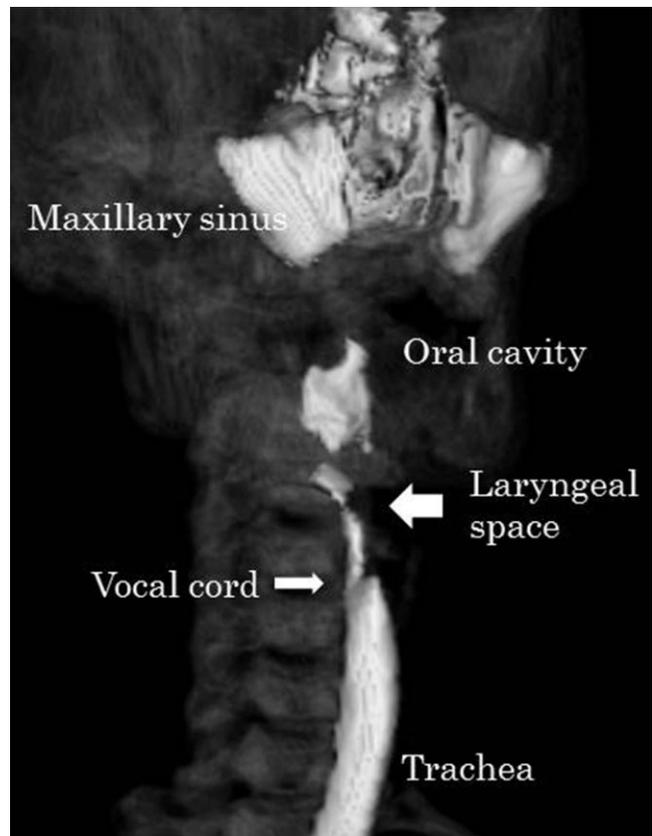


Fig. 1. The reconstructed image of post-mortem computed tomography for the airway of the patient. The airway above the vocal cord was completely obstructed. The base of tongue is also occupied by soft tissues.

laryngoscopy failed to allow any sufficient view of larynx, and the two trials were followed by esophageal intubation. The senior anesthesiologist was called and attempted intubation using Airway Scope® (AWS-S100L, NIHON KOHDEN, Tokyo, Japan). Although the blade of scope seemed to be adequately and correctly inserted, the vocal cord was never visualized by massive mucosal tissues. Cardiovascular instability developed and the trachea was immediately punctured using MiniTrach II (Smiths Medical, Tokyo, Japan). Although oxygenation was improved, recovery of spontaneous circulation was never obtained.

Two hours after death, PMCT was done at the request of her family. Whole-body imaging showed no specific abnormality in the organs; however, the laryngeal space of the patient was narrowed with hypertrophied tissue, suspected as lingual tonsillar hyperplasia (Fig. 1). Not only the longitudinal diameter, but also the transverse diameter of laryngeal airway was constrained by the soft tissues. There was a very narrow and disconnected laryngeal space of the airway around hypopharynx. No further abnormality was found in the oral cavity, vocal cord, trachea or bronchi.

As far as our knowledge, this is the first report of PMCT and difficult airway.^{4,5} Airway problems, including choking and asphyxia with food, are not uncommon in ER; however, a foreign body would be removed as quickly as possible by paramedics or ER staffs. Thus, the chance for PMCT to investigate the abnormality of upper airway is absolutely limited.⁴ ER physi-