



Resuscitation Council (UK)

Training people, saving lives

Ms Hill

Coroner for Inner South Greater London

H.M. Coroner's Court

Tennis Street

Southwark

SE1 1YD

Dear Ms Hill

Resuscitation Council (UK) response to Regulation 28 Report to prevent Future Deaths concerning the use of supraglottic airways (SGAs)

I am responding to the Matters of Concern following a death on 18 April 2016. You state 'that the use of an SGA may be inhibited by an undetected foreign body airway obstruction. Such an obstruction might be spotted if the use of an SGA was made conditional on the carrying out of a laryngoscopy which it is understood will soon be LAS protocol'.

The Resuscitation Council (UK) has put together a small group of national and international experts in emergency airway management from members of its Executive Committee to address your concern. The group consists of Professor Charles Deakin, Dr David Gabbott, Dr Carl Gwinnutt, Professor Gavin Perkins, Professor Jerry Nolan and myself. Our response and the reasons for it are below:

1. In our opinion laryngoscopy is not indicated every time a supraglottic airway (SGA) is inserted.
2. Laryngoscopy is indicated when it is carried out by a suitably trained rescuer when:
 - a. Foreign body airway obstruction is thought to be the cause of cardiorespiratory arrest, or
 - b. Initial attempts at ventilation with a SGA are unsuccessful.
3. The reasons for our opinion are:
 - a. When cardiac arrest occurs after foreign body airway obstruction, the chance of successful resuscitation is very small compared to survival after other causes of cardiac arrest such as a myocardial infarction. In addition, foreign body airway obstruction as a cause of cardiac arrest is relatively uncommon compared to primary cardiac causes.
 - b. Survival from cardiac arrest depends on early cardiopulmonary resuscitation (CPR) with minimal interruption in chest compressions. We do not wish to recommend additional interventions for

the resuscitation of all cardiac arrests that will lead to potentially harmful delays in starting CPR and additional interruptions in chest compression.

- c. It is important to also note that chest compressions are also a part of the treatment algorithm for foreign body airway obstruction. By forcing out air from the lungs, chest compressions can dislodge a foreign body in the airway.
 - d. SGA insertion is a far easier skill to learn and perform than laryngoscopy. The number of potential rescuers who can be trained to effectively use a SGA is far greater than the number of individuals who are proficient at laryngoscopy. Adding routine laryngoscopy training for all those who are trained to insert a SGA would not be practical in all settings. Laryngoscopy by untrained or inexperienced rescuers will not guarantee a foreign body obstructing the airway is seen or removed.
 - e. Once a SGA is inserted, effectiveness of ventilation is assessed by looking for the chest to rise when a breath is given and by monitoring for the presence of exhaled carbon dioxide from the lungs. The usefulness of routine monitoring for exhaled carbon dioxide (end-tidal carbon dioxide monitoring) when a SGA is used remains uncertain.
 - f. It is reasonable for appropriately trained rescuers to check the airway by looking with a laryngoscope in those cases where choking or foreign body airway obstruction is suspected, or when ventilation after SGA insertion or by other means (e.g. with a bag mask) is not effective.
 - g. Laryngoscopy is a complex skill used to visualise the upper airway, most commonly for inserting a tube in the windpipe (tracheal intubation). The use of laryngoscopy to look for a foreign body that is obstructing the airway and if appropriate remove it will be most effective when undertaken by those who are trained and proficient in tracheal intubation as part of their role.
4. The Resuscitation Council (UK) Advanced Life Support (ALS) course manual (Seventh edition, January 2016) already addresses this issue:
- 'As soon as an individual with appropriate skills is present, undertake laryngoscopy and attempt to remove any foreign body with Magill's forceps.'
5. The Resuscitation Council (UK) ALS course already includes a cardiac arrest teaching scenario of a person with foreign body airway obstruction. This addresses the key steps of laryngoscopy and removal of an airway foreign body with Magill forceps after initial attempts at ventilation fail and choking is suspected.
6. A large research study is currently underway in the UK that compares the use of a SGA (the i-gel™) and tracheal intubation for airway management during CPR for out-of-hospital cardiac arrest (AIRWAYS-2, <http://www.airways-2.bristol.ac.uk/>). This will provide further information about the relative benefits or harms of supraglottic airways and tracheal intubation during CPR.

7. Finally, although the Resuscitation Council (UK) produces guidelines using a process accredited by The National Institute for Health and Care Excellence (NICE), decisions about actual training and practice are ultimately made by the National Ambulance Service Medical Directors (NASMeD), and the Association of Ambulance Chief Executives (AACE). In preparing this response, the Resuscitation Council (UK) has been in communication with London Ambulance Service (LAS) who are working with NASMeD and AACE to review guidance and practice. The Resuscitation Council (UK) will share its response with these organisations and liaise with them further if appropriate. The Resuscitation Council (UK) can provide you with further information if required.

Yours sincerely

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Resuscitation Council (UK).

cc Association of Ambulance Chief Executives (AACE), National Ambulance Service Medical Directors (NASMeD),
London Ambulance