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Should the Dominant or Nondominant Hand Be Used for Applying Cricoid Pressure?

To the Editor:

In their excellent review, Salem *et al.*[1] suggest that the dominant hand should be used to apply cricoid pressure (CP) because even though either hand can achieve adequate CP, the applied force may become inadequate if it needs to be sustained with the nondominant hand.[2] I suggest that if there is any possibility that the person applying CP may be asked to perform a task that can be done with one hand (*e.g.*, upper lip retraction, removal of stylet), the CP should be applied with the nondominant hand. I have noticed that if one ever asks that person to do something, they reflexively tend to use their dominant hand and thus may prematurely release CP, putting the patient at increased risk of aspiration. Ideally the person applying CP should not be asked to do anything else. However, sometimes one is in the situation where additional trained personnel are not available. Most airways are secured quickly enough that fatigue of the nondominant hand does not become an issue.

Competing Interests

The author declares no competing interests.

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Cricoid Pressure: Effective Measure or Ritual?

To the Editor:

I read with great interest the review on cricoid pressure (CP) by Salem *et al.*[1] The authors assure the reader that they have "used discretion in deciding which articles to finally include, favoring peer-reviewed articles from highly ranked journals written in English." However, a couple of key references are missing, and a couple of publications require additional commenting to place the findings in the proper clinical perspective.

Although the authors cite those recent guidelines that indicate the common use of CP, they fail to cite those guidelines recently published by various national and international professional societies that no longer recommend routine application of CP. These include the 2010 Scandinavian Clinical Practice Guidelines on General Anesthesia for Emergency Situations,[2] the 2015 Guideline on Airway Management released by the Board of the German Society of Anesthesiology and Intensive Care Medicine,[3] and the 2015 European Resuscitation Council Guidelines for Resuscitation.[4] Obviously, these guidelines reflect the doubt of the respective professional societies that the benefits of this technique outweigh its disadvantages. This may have considerable medicolegal implications, because a physician would no longer be blamed *per se* for not having applied CP. Based on findings of nonrandomized controlled trials, a recent Cochrane review concluded that CP may not be necessary to safely perform rapid sequence induction.[5]

The authors interpret recently published findings of an *in vitro* investigation of a tactile, single-use cricoid cartilage compression device[6] as showing that by, "careful titration of the force, the operator can be assured that the cricoid force is between 30 and 35 N." However, the actual findings do not support this generalized statement. During 114 attempts, the target force of 30 N was achieved in only 15 attempts (13%), and a range of forces of 25 to 35 N was achieved in only 35 attempts (31%). These less-than-optimal results occurred despite highly controlled experimental conditions (*i.e.*, application of cricoid force on a CP training simulator by practitioners familiar with both device and simulator). It is predictable that the results will be even less favorable when CP is applied under less controlled conditions in humans with highly variable neck anatomy.

At first glance, the authors' recommendation for training of personnel performing CP seems reasonable. However, because such training would have to be provided for countless healthcare providers every 2 weeks to 3 months (the duration of retention of training-acquired respective skills), such a recommendation is entirely unrealistic. It would be interesting to know whether members of the authors' departments are this often regularly retrained in the application of CP.

Why does the CP literature continue to focus so closely on the cricoid force to be applied rather than on