

Cricoid pressure, can it still be done?

Dear Editor,

Cricoid cartilage pressure was first described by Sellick in 1961 and consists of pressure applied on cricoid cartilage against the cervical vertebrae to occlude the upper esophagus and prevent regurgitation of gastric contents into the lung¹.

The initial success of the maneuver began to be questioned after the report of some cases of gastric contents aspiration followed by death, despite its use². Some factors may contribute to the failure of this maneuver, such as incorrect time of pressure application, use of excessive force, and pressure on inappropriate location.

Smith et al.³ studied computed tomography of normal subjects and concluded that the esophagus was laterally displaced in 49% of participants. Rice et al.⁴ conducted another study of magnetic resonance imaging and concluded that the maneuver created by Sellick can compress the hypopharynx and esophageal position is irrelevant for its execution.

These studies' results are conflicting and therefore require further research in order to confirm the results of one or another. The controversy will continue for many years, as the

implementing of a prospective controlled study in this setting would not be ethical, and the initial study published by Sellick was performed in cadavers^{1,5,6}.

Cricoid cartilage pressure may be useful at the time of orotracheal intubation for its potential to facilitate vocal cords visualization; however, this effect is not unanimous in all researches – and some still report that it compromises the success of intubation^{1,7}.

In short, it is still possible to perform cricoid cartilage pressure to prevent regurgitation of gastric contents, as the total lack of its efficacy has not yet been confirmed in clinical practice. Another remarkable fact is that regurgitation followed by pneumonia is a rare event, which hinders the perception of the effectiveness or not of this maneuver in daily practice¹. Common sense, prior training and practice of each professional will guide the best clinical approach towards each particular case until new studies demonstrating its ineffectiveness are performed.

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