Does Cricoid Pressure Impair Success of Lightwand Intubation?

The lightwand has been used widely for intubation in the operating room (OR) and has been advocated as a rescue device for failed intubation in the ED. Cricoid pressure (CP) is used during rapid sequence intubation to reduce aspiration risk, but there have been no studies examining the effect of CP on the success of intubation using a lightwand. These authors from South Africa randomized 60 patients undergoing elective hysterectomy to lightwand intubation with and without CP.

All patients underwent general anesthesia with thiopental and isoflurane and paralysis with vecuronium. CP was applied by experienced OR nurses. All lightwand intubations were performed by a single anesthetist. All 30 of the no-CP patients were intubated on the first attempt. Of the 30 CP patients, 26 were intubated on the first attempt, 3 on the second, and 1 could not be intubated. The median time to intubate on the first attempt was significantly longer with CP than without (48.5 vs. 28.0 seconds). The patient in whom intubation failed had a large floppy epiglottis and required 2 attempts with direct laryngoscopy for successful intubation.

Comment: Based on this study, I do not agree with the authors' conclusion that the lightwand cannot be used for RSI. All patients were women, the intubator had never intubated with a lightwand and cricoid pressure, different nurses applied the cricoid pressure, and the 1 intubation failure would have been a failure with or without cricoid pressure. It is reasonable to conclude, however, that cricoid pressure makes lightwand intubation more difficult, and this should be taken into account when planning the intubation.

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