Reviewer's report

Title: Comparison of the Glidescope, flexible fiberoptic intubating bronchoscope, iPhone modified bronchoscope, and the Macintosh laryngoscope in normal and difficult airways: A manikin study.

Version: 1 Date: 19 November 2013

Reviewer: Lorenz Theiler

Reviewer's report:

Major Compulsory Revisions

The study goal remains unclear. Was it to show feasibility to use a smartphone as a screen on a fiberoptic bronchoscope? That's hardly worth a study. Was it to show there is no relevant time difference between fiberoptic with a smartphone screen vs. no screen? Then why should the anesthetist bother using a smartphone? It would have been different if the authors had tried to show how the smartphone was a useful teaching device in case there is no other screen around.

The last sentence in the Background section remains completely unclear. What are “non medical anesthetic personnel”, and how should recruiting those account for variables that may influence performance?

The sample size calculations remain unclear. First, one of the study mentioned (reference 7) showed results in patients, not manikins. Second, it remains unclear why 20 seconds should be clinically meaningful. Third, the method to calculate the sample size should be mentioned.

The discussion is unnecessarily long and can easily be shortened by half.

The conclusions are not supported by the study and should be re-written. The only conclusion that can be drawn is the fact that performance with the iphone device was similar to the standard fiberoptic device.

The figures are not helpful to understand the study results. Fig 3 C and D are unclear – is this the mean of all devices? Shouldn’t they graphs rather show the difference of the devices in both scenarios?

Minor Essential Revisions

The second sentence and the last sentence in the abstract (conclusion) are not supported by the data and should be omitted.

Usually, only one primary endpoint is given. In this case, time to intubate. All other endpoints are secondary endpoints.

Some minor editing are necessary (e.g. “consultant anaesthesist”)
Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'