

**Peer Review File**

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**Reviewer A**

This is a reasonable piece of work looking at one element of infection prevention and control in relation to intubation. The methods are reasonable and the study shows that under experimental conditions surface contamination is reduced. The write-up of the experiment is good.

**Comment 1:** I suggest that the authors discuss in a bit more detail how this is only one element of IP&C and mention other factors that are important in terms of preventing cross-contamination.

**Reply 1:** We thank the reviewer for highlighting this important point and have added the following text under discussion.

**Changes in the text,** page 14, paragraph 2, lines 4-13:

Prevention of cross-contamination around intubation is critical for patient and staff safety. Many measures can be adopted to minimize this cross-contamination like using standard precautions introduced by Centers for Disease Control and Prevention (CDC), hand washing, adequate use of gowns and gloves, disinfection of anesthesia machine and work surface between patients, and adoption of disposable direct laryngoscopes. The increased use of video laryngoscopes necessitates use of disposable video laryngoscope blades and proper decontamination of video handles, connecting cables and video screens. BladePouch is complementary to the above measures and can further decrease the contamination of work surface by isolation of contaminated direct and video laryngoscope blades (7, 9, 22).

**Comment 2:** The authors also reference some neonatal studies demonstrating the effect of some pathogens on that group. I wasn't sure of the relevance of these studies and they seemed a bit incongruous. I am not sure the sentence adds much and I would be inclined to remove the sentence and the references.

**Reply 2:** We appreciate the reviewer's comments about the neonatal studies and have removed the sentence and the associated references.

**Changes in the text,** page 12, paragraph 1: Following sentence was removed.

~~Several studies have identified the same microorganisms in deadly neonatal outbreaks, which were isolated from the ready to use blades (2,20)~~

**Reviewer B**

I congratulate the authors for the simulation study conducted to compare two different methods to prevent superficial contamination during and after the endotracheal intubation procedure.

The authors used BladePouch and gloves to prevent superficial contamination of the laryngoscope blades in the study and concluded that the use of BladePouch prevented external contamination compared to the use of gloves.

Of course, this is a simulation study and cannot be expected to give the same result in every clinical scenario.

**Comment 1:** Especially in difficult intubation situations, covering the laryngoscope blade with Blade Pouch may deteriorate the image quality and make it difficult or even prevent the intubation.

**Reply 1:** We thank the reviewer by raising this comment for us to clarify. The BladePouch is designed and used in the study to store the contaminated laryngoscope or video laryngoscope blade after the use. It is not used to cover the laryngoscope blade during intubation. We have clarified this at various points in the manuscript.

**Changes in the text:**

Page 3, paragraph 1, line 7:

Abstract- Background. We assessed if contamination of the surfaces after endotracheal intubation would be reduced when providers used a dedicated, a self-erected, disposable plastic sleeve (BladePouch) to ~~securing~~ store the used laryngoscope as compared to using single gloves or double gloves and sheathing the laryngoscope with the outer gloves.

Page 6, paragraph 2, line 21 and page 7, paragraph 1, line 1:

Manuscript- Introduction:

The primary aim of this study was to determine whether contamination of the surfaces after intubation would be different when providers ~~secured~~ stored the contaminated laryngoscope using a single pair of gloves; double pair of gloves and sheathing the soiled laryngoscope with outer glove; or the BladePouch. We hypothesized that using the BladePouch to ~~sheath~~ store the laryngoscope would reduce contamination when compared to using single gloves or isolating the laryngoscope in the outer glove using double gloves technique.

In addition, it is impossible to expect contamination of all microorganisms to be prevented by using gloves or BladePouch alone.

Because it has been shown that even wearing a double layer of gloves cannot prevent the passage of some microorganisms transmitted from surgeons' hands.

**Comment 2:** The most basic method of preventing contamination is correctly cleaning hands and surface areas with bactericidal agents.

**Reply 2.** We are grateful to the reviewer for emphasizing this important concept and have added the following statement in the discussion.

**Changes in the text,** page 14, paragraph 2, lines 4-13:

Prevention of cross-contamination around intubation is critical for patient and staff safety. Many measures can be adopted to minimize this cross-contamination like using standard precautions introduced by Centers for Disease Control and Prevention (CDC), hand washing, adequate use of gloves and gowns, disinfection of anesthesia machine and work surface between patients, and adoption of disposable direct laryngoscopes. The increased use of video laryngoscopes necessitates use of disposable laryngoscope blades and proper decontamination of video handles, connecting cables and video screens. BladePouch is complementary to the above measures and can further decrease the contamination of work surface by isolation of contaminated direct and video laryngoscope blades (7, 9, 22).

**Comment 3:** Therefore, as a result of the study, it should not be concluded that only the use of BladePouch can definitely prevent external contamination, and this should be added to the limitation part of the study.

**Reply 3.** We agree with the reviewer and added the following statement under limitations. Abstract conclusion was modified as well.

**Changes in the text,**

Page 14, paragraph 2, lines 20-22:

Discussion: Another limitation of the study is that BladePouch alone cannot reduce cross-contamination and should be used in conjunction with standard precautions.

Page 3, paragraph 2, line 6:

Abstract. Conclusion: In conjunction with standard precautions, the use of a dedicated plastic sleeve to store contaminated laryngoscope blade after endotracheal intubation may reduce the work surface contamination, independent of intubation device, role and experience of providers.

However, the work of the authors is noteworthy and can be a guide for future studies.