Author's response to reviews

Title: Bronchoscopic Retrieval of a Bullet Using a Dormia Basket

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Author's response to reviews: see over
Bronchoscopic Retrieval of a Bullet Using a Dormia Basket: A Case Report

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Thank you for consideration of our manuscript for publication in your journal.

We have reviewed the manuscript according to your reviewer’s comments.

Reviewer #1 (Dr. Hadda)

Major Changes

1.) Authors have done a good job and shown that FOB may be useful in some of these patients. However I would suggest that authors should mention expected complication/s while using FOB among such patients and importance of standby rigid bronchoscope, if needed.

- Additional Paragraph added to Discussion

   In general, FOB is used for evaluation of distal airways and basic procedures such as biopsy, bronchoalveolar lavage, and suctioning of mucus plugs and blood clots. Complications of FOB include airway obstruction, hypoxemia, and mechanical trauma to the trachea and bronchus. In the event of airway obstruction or failure to remove a foreign body while using FOB, it is important that a rigid bronchoscope be readily accessible. The rigid scope allows for better airway control with the administration of ventilatory support via a side-port, and a larger array of instruments such as forceps, hooks and balloons, to choose from.

Minor Changes/Additions

1. “Removal of foreign bodies from the airway is essential in order to avoid complications such as tracheal stenosis, pneumonia, bronchiectasis and bullet migration.”

   I suggest it should be “foreign body migration” instead of “bullet migration”

   - Done

2. “There have been a small number of successful reports describing the management of airway injuries and retained ballistic fragments. 1-4

   The sentence is not giving the desired message. Do authors want to state that
“There have been a small number of reports describing the successful management of airway injuries and retained ballistic fragments. 1-4”. If so, please rephrase it.

- We want to send the message that penetrating injury to the trachea resulting in retained foreign body is a rare event, therefore a “gold standard technique” for retrieval during an emergent situation (trauma patient) does not exist. This idea is supported by the fact that only a few case reports exist that describe a method for retrieval. The sentence has been changed to “Given the rarity of this injury, a standard procedure for retrieval of foreign bodies within the airway in a trauma setting has yet to be established. There have been only a few case reports describing the successful management of retained ballistic fragments within the airway using bronchoscopic technique. 1-4”

3. In case presentation section, authors should describe that after how much time of injury the patient came to emergency?

- We have added the timing “On initial evaluation, approximately twenty minutes after injury, patient was alert, oriented, speaking full sentences and was only complaining of pain to her neck. “

2. Initial vital signs were HR 118, BP 144/85, RR 20, Sat 100% on 2L non-rebreather, breath sounds were present bilaterally, and there was no evidence of subcutaneous emphysema. Expand all abbreviations (HR, RR etc.)

- Changed Initial vital signs were heart rate 118, blood pressure 144/85, respiratory rate 20, pulse oximetry 100% on 15L non-rebreather, breath sounds were present bilaterally, and there was no evidence of subcutaneous emphysema.

3. “Computer topography (CT) with intravenous contrast showed significant pneumomediastinum extending to the skull base, a bullet lodged within the lower pulmonary segment of the right bronchus, and a luminal irregularity of the distal trachea.” Please use the accepted terminology for bronchii to describe the actual location of the bullet in the tracheo-bronchial tree.

- Changed Computer topography (CT) with intravenous contrast showed significant pneumomediastinum extending to the skull base, a bullet lodged within the right bronchus intermedius, and a luminal irregularity of the distal trachea.

4. The bullet was visualized within the right bronchus intermedius and lodged
within the lower lobe bronchi. The statement is confusing. Where exactly the bullet was in bronchus intermedius or lower lobe bronchus?

- Changed . The bullet was visualized within the right bronchus intermedius.

5. An EGD was preformed which did not reveal any injury to the esophagus. Please expand EGD

- Changed A esophagogastroduodenoscopy was preformed which did not reveal any injury to the esophagus.

6. The use of flexible bronchoscopy has been document for removal of foreign bodies secondary to aspiration. Correct the sentence “documented”

- Changed The use of flexible bronchoscopy has been documented for removal of foreign bodies secondary to aspiration.

7. Fulginiti et al describe the removal of a bullet using flexible bronchoscopy and biopsy forceps in a 23 y/o patient in the ICU setting who was mechanically ventilated. Make “describe” “ described”

- Changed Fulginiti et al described the removal of a bullet using flexible bronchoscopy and biopsy forceps in a 23 y/o patient in the ICU setting who was mechanically ventilated.

8. Figure 1: Chest X-ray showing a bullet within the right mediastinum. I think the bullet is away from the mediastinum. Can it be written as right para-cardiac?

- Changed Figure 1: Chest X-ray showing a bullet located within right para-cardiac position.

9. It will be better if you can put some form of pointer/indicator (such as arrow) in the figure 2 to show the findings of CT scan.

- Arrow added to figure 2

10. Figure 3: Bullet seen within the right bronchus during bronchoscopy. Please mention the exact site of the bullet.

- Changed Figure 3: Bullet seen within the right bronchus intermedius during bronchoscopy

Reviewer #2 (Dr. Tarras)
**Major Changes**

1. *I would explain a little more about what a Dormia basket is, what it is generally used for, since this is something that the trauma surgery probably doesn’t use too often. This can probably go in the discussion section and perhaps include a picture of one outside the body. Also its use in other foreign body aspirations.*

- **Paragraph added to discussion** A Dormia Basket is an endoscopic retrieval device developed in 1961 by an Italian Urologist, Enrico Dormia. The original design consisted of a four wire basket used for ureteral stone retrieval. Modified versions now incorporate three, four or six stainless steel wire baskets in flat or helical arrangement with a range of wire stiffness and basket width options. These modifications have allowed for expanded application of the device for use during extraction of biliary stones, polyps, food bolus impactions, and foreign body aspirations. FOB is particularly useful in the pediatric population were foreign body aspiration is common. The pediatric literature has reported FOB as a safe and useful means of foreign body retrieval generally with biopsy or grasping forceps.


- **Picture of Dormia Basket Added**

**Minor Changes**

1. *In the section on Case presentation, there are vitals and it is reported that the "sat is 100% on 2L non-rebreather", should be edited to pulse oximetry is 100% on a 15L or 10L non-rebreather? Usually non-rebreathers are 10 or 15L not 2L.*

- **Changed** Initial vital signs were heart rate 118, blood pressure 144/85, respiratory rate 20, pulse oximetry 100% on 15L non-rebreather, breath sounds were present bilaterally, and there was no evidence of subcutaneous emphysema.