presentation of melioidosis includes suppurative lesions in head and neck, soft tissue infection, pneumonia, and septicemia [3,4]. Our patient presented with membranous tonsillitis and erythema nodosum, common entities in pediatric practice, but *B. pseudomallei* as the etiologic agent for the same has not been previously reported. Two patients with pharyngitis with pharyngeal culture-positive, and a single patient with urticarial rash and blood culture positive for *B. peusdomallei* has been reported by Lumbiganon, *et al.* [4]. A study by Wuthiekanun, *et al.* [5] reported 100% specificity and 36% sensitivity of throat swab culture for melioidosis. Due to low sensitivity, throat swab warrants the need for adjunctive tests.

A high index of suspicion is required to diagnose melioidosis due to its varied presentation, especially in the presence of predisposing conditions like exposure to soil, water, rainy season, or an immunocompromised state.

Acknowledgements: Dr Sowmini P Kamath and Dr K Jayashree, of our department for case management.

Contributors: SSR, NK: Both authors were involved in case management, and manuscript preparation.

Funding: None; Competing interest: None stated.

**REFERENCES**


**Sedation in Pediatric Bronchoscopy: Propofol versus Fentanyl**

We read with interest the article by Gunathilaka, *et al.* [1] reporting on comparison of propofol and fentanyl for sedation in pediatric bronchoscopy. We wish to raise the following issues related to the article:

(i) The authors state that the allocated assignment was not disclosed to the bronchoscopist and the patient. However, the independent observer who also decided the cough score, secretion score and physician satisfaction score was not blinded to the assignment and this could have caused assessment bias in the study. Additionally, the primary investigator was not blinded to the study arm. However, the stop watch reading to document the time of achievement of Ramsay score 3 (primary outcome) was done by the primary investigator himself, which may have increased the chances of assessment bias in the study. It would have been better that a third person not involved in the study and blinded to the intervention was given the responsibility of assessing primary outcome (time to achieve Ramsay score 3).

(ii) The baseline characteristics table shows that mean (SD) oxygen saturation was 99.1 (1.5) and 99.1 (1.4) in propofol and fentanyl groups, respectively. This implies that upper limit of oxygen saturation was more than 100% in both the groups, which is not possible.

(iii) The results show that the mean (SD) time to achieve Ramsay score 3 (primary outcome) was 15.7 (4.4) seconds in propofol group. However, in secondary outcomes, the additional midazolam doses needed in propofol group was 11. But midazolam could only be used if the child was not sedated within 180 seconds. So the use of midazolam needs more clarification.

(iv) The article mentions that intravenous midazolam was repeated every 1 minute if Ramsay score of 3 was not achieved. The onset of effect for midazolam is 1 to 2.5 minutes, the peak effect is at 3 to 4 minutes, and the duration of effect is 15 to 80 minutes [2]. In a meta-analysis done for the comparison of propofol and midazolam for bronchoscopy [3], in all the four included randomized controlled trials, midazolam
was given every ≥ 2 minutes if sedation goal was not achieved [3].

(v) If midazolam was being used for sedation as mentioned above, then it is difficult to rely on the results because the time to achieve sedation and recovery would have also been affected by midazolam. Applying a regression analysis in the outcome variables would have been more justified [4].

Funding: None; Competing interests: None stated.

Gaurav Gautam and Daisy Khera*
Department of Pediatrics,
All India Institute of Medical Sciences,
Jodhpur, Rajasthan, India.
daisykhera78@gmail.com

REFERENCES

Authors’ Reply

We thank the readers for their interest in our article [1]. The authors have pointed out few issues; most of these were already addressed in the article. Following are our responses to the points highlighted [2].

(i) We have mentioned various aspects of conduct of the trial in detail in the study methods. The limitation of the study being an open label study have been clearly mentioned in the discussion. For an open label study, we took various measures to reduce the risk of bias. However, to take care of the bias better, a blinded study - a double dummy design - would have to be performed. To reduce the bias, regarding cough score, secretion score, bronchoscopist and an independent observer assigned the scores independently (these details were mentioned in the manuscript).

(ii) The mean and standard deviation values for oxygen saturation are correct. A standard deviation of 1.4 when mean value is 99.1 does not mean that some values were more than 100; this is a common misconception. The standard deviation is one of the measures of dispersion. For baseline saturation, the maximum value was 100% in both arms while the lowest values were 94% and 95% in the propofol and fentanyl arms, respectively; this suggests that there was a skew to left. The median (IQR) values were 100% (98%, 100%) and 100% (98%, 100%), respectively in the propofol and fentanyl arms.

(iii) We have clearly highlighted the indications for use of midazolam in the methods. After the initial 180 seconds, there was another indication “In addition, midazolam was administered at a dose of 0.1 mg/kg (maximum dose of 5 mg) bolus at a time up to maximum of two doses, for those who had inadequate sedation to continue procedure irrespective of the arm [1]”. The time to achieve adequate sedation was 15.7 (4.4) seconds in the propofol group and no child received midazolam initially; however, 11 children received midazolam later during the conduct of the procedure in the propofol group for the above-mentioned indication.

(iv) We agree with the details of midazolam provided by the authors. The frequency of administration of midazolam doses in our study is supported by the range of time of onset of action. We used the same protocol of administration of midazolam in the two arms of our study.

(v) In the propofol group, no child needed midazolam to achieve appropriate sedation within first 180 seconds; some of them had to be administered midazolam later to maintain sedation for the overall procedure. Therefore, the superiority of propofol over fentanyl for the primary outcome is unlikely to be affected by adjusting for midazolam usage.

Rakesh Lodha and SK Kabra*
Department of Pediatrics,
All India Institute of Medical Sciences,
New Delhi, India.
skkabra@hotmail.com

REFERENCES