

Candidate No: _____



The Hong Kong College of Anaesthesiologists

Final Fellowship Examinations

Paper II – Critical Appraisal of Literature

9 April 2024 (Tuesday)

11:30 – 12:10 hours

Article

**“Incidence of adverse respiratory events after adjustment of clear fluid fasting recommendations to 1 h: a prospective, observational, multi-institutional cohort study”
Schmitz, et al. British Journal of Anaesthesia 2024; 132 (1): 66- 75.**

Instructions

- There are 8 multiple choice questions in this section, based on the above paper.
- **ANSWER ALL** questions, they carry equal marks.
- For each question, choose the **ONE** best answer and mark this on the answer sheet.
- If you mark more than one answer, you will receive NO mark for that question. No marks will be deducted for incorrect answers.

1. Which of the following statement is an accurate description of the study design?

- A. A prospective, observational, single-institutional cohort study.
- B. A retrospective, observational, multi-institutional case-control study.
- C. A prospective, observational, multi-institutional cohort study.
- D. A prospective, interventional, multi-institutional randomized controlled study.
- E. A retrospective, observational, multi-institutional cohort study.

2. Why was informed consent not required in this study?

- I. The study was undergoing in paediatric population.
- II. The fasting policies were consistent with published evidence and guidelines.
- III. This research project did not fall into the scope of the Human Research Act.
- IV. There was no change in patient care.

- A. I only.
- B. IV only.
- C. I & II only.
- D. II & III only.
- E. II, III & IV only.

3. Which of the following patient groups were excluded from the study?

- A. Patients undergoing emergency operation.
- B. Patients with ASA physical status 3 or 4.
- C. Patients aged under 3 months.
- D. Patients undergoing operation with sedation or regional anaesthesia.
- E. Patients undergoing diagnostic procedure only.

4. Which of the following factors were taken into account for sample size calculation of this study?

- I. Clinical significance (0.05).
- II. Power of this study (0.9).
- III. Known reference incidence of aspiration (0.1%).
- IV. Assumed incidence of aspiration under new fasting policy (0.2%).

- A. I & II.
- B. III & IV.
- C. I, III & IV.
- D. All of the above.
- E. None of the above.

5. How did the author handle those 30 cases with fasting times missing?

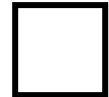
- A. Traced the exact fasting times with searching of patient records.
- B. Filled the timing with assumed fasting times.
- C. Randomly assigned fasting times for every case.
- D. Excluded them from the study.
- E. Excluded them from specific analysis but not from outcome calculation.

6. Which of the followings is correct considering the results of this study?

- A. The overall incidence of confirmed and suspected aspirations was 0.22%.
- B. There was significantly more adverse respiratory event in 1-hour clear fluid fasting group.
- C. There was significantly more adverse respiratory event in patients undergoing operation with face mask or laryngeal mask airway.
- D. No adverse respiratory event was recorded for patients undergoing anaesthesia after 3pm.
- E. Patients undergoing office-based anaesthesia were at higher risk of aspiration.

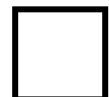
7. In results part of the abstract, the author mentioned *“Subgroup analysis by effective fasting times (<2 h [n=7306] vs >2 h [n=14 660]) showed no significant difference for pulmonary aspiration between these two groups (9 [0.12%] vs 16 [0.11%], P=0.678)”*. What is the problem of the statement?

- A. Selection bias.
- B. Recall bias.
- C. False negative.
- D. False positive.
- E. Confounding bias.



8. According to this article, what are the advantages of performing a cohort study investigating relationship between fasting time and incidence of aspiration?

- I. Can determine incidence of the aspiration.
 - II. Can reduce recall bias.
 - III. Incidence of aspiration is rare.
 - IV. Can establish ‘number needed to treat’ of intervention.
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- A. I only.
 - B. I and II only.
 - C. II and IV only
 - D. I, II and III only.
 - E. All of the above.



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