

Different sedation practices in a bronchoscopy unit. Does it really matter?



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Background

At the bronchoscopy unit in Mater Dei Hospital there is a wide variation among respiratory teams regarding the use of sedatives and local anaesthesia (LA) during flexible bronchoscopy (FB). An ideal sedative should result in improved safety, as well as enhancing patient tolerance and comfort.

Aim

To assess if there is a disparity in patient comfort between different sedation practices.

Methods

All consenting patients undergoing FB over 18 months were included prospectively. Bronchoscopy nurses completed a survey at the end of each FB. Likert's scale (0-10): rating ease and comfort of FB; and Ramsay scale: assessing depth of sedation, were used.

Patient phone surveys were conducted on the same day using Likert's scale. Bronchoscopy notes were reviewed regarding choice of sedative and LA. Data was analysed by SPSS, using Kruskal Wallis and Chi square tests.

Level / Score	Clinical Description
1	Anxious / agitated/ restless
2	Cooperative and tranquil
3	Responds only to commands
4	Brisk response to loud noise
5	Sluggish response to loud noise
6	No response to loud noise

Ramsay Scale - Extent of sedation

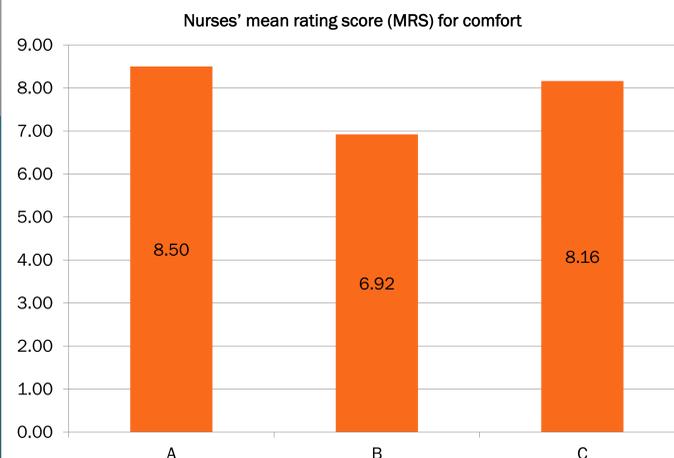
Results

From a total of 259 FB, 124 patients had to be excluded. Of the included 135 patients, 74.8% were males. The mean age was 64 (Range: 22-87).

14.8%, 61.5%, and 23.7% were given alfentanil (group A), midazolam (group B), and both alfentanil and midazolam (group C) accordingly.

Group	Sedatives
A	Alfentanil
B	Midazolam
C	Both Alfentanil and Midazolam

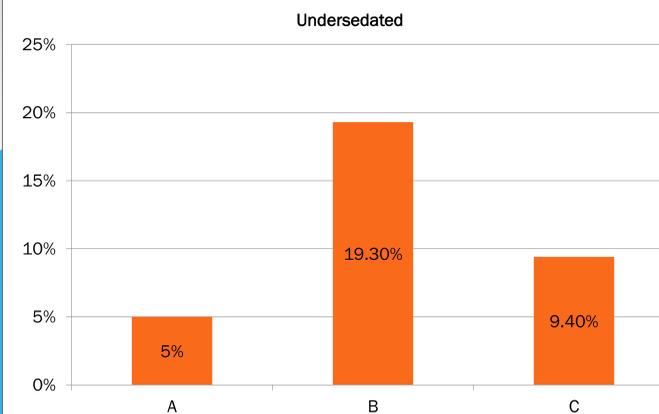
The nurses' mean rating score (MRS) for comfort during procedure was 8.5, 6.92 and 8.16 for A, B and C (p=0.002).



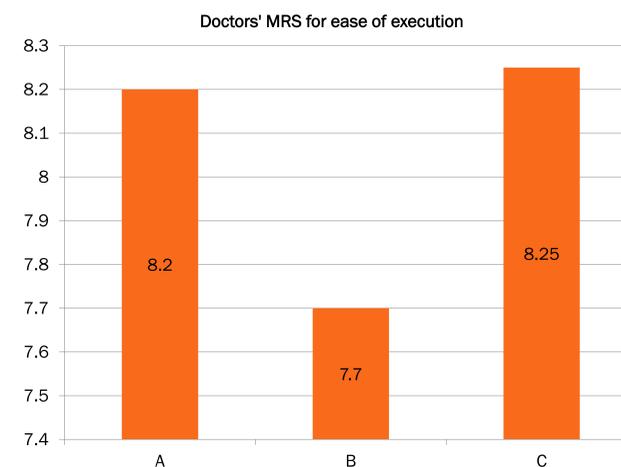
The extent of sedation was scored according to the Ramsay scale. A **Ramsay scale of 2** showed that '**conscious sedation**' was obtained in 75% of A, 62.7% of B and 68.8% of C (p=0.450).

...Results

Over sedation was comparable among the 3 groups. With regards to under sedation a notable difference was noted. There were 5% patients in group A, 19.3% in B and 9.4% in C.



Doctors' ease of execution (as scored by nurses) favored group C with MRS 8.25 vs 8.2 in group A and 7.7 in group B (p=0.272).



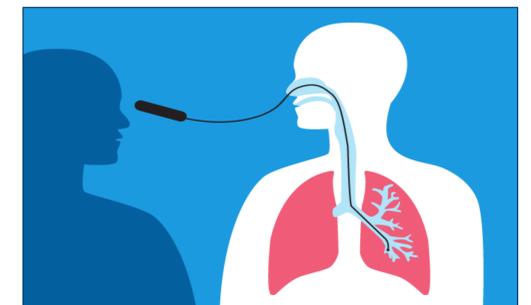
5%, 3.6%, 3.1% had a prolonged recovery in A, B and C accordingly (p = 0.939). Reversal was needed in only 1 patient in the midazolam group.

...Results

Mean Rating Scale for anxious personality and anxiety on the day of the procedure did not differ among the three groups.

MRS for patient anxiety, comfort during LA, comfort during tube insertion and comfort during rest of procedure including dyspnoea and cough were similar in all groups.

All patients in the Alfentanil group are willing to have the procedure repeated, against 96% in Midazolam group and 93% in the mixed group (p= 0.508)



Conclusions

There is conformity in patient-reported comfort between all 3 sedation practices in Malta. Nurse-reported patient comfort however favoured alfentanil. The majority of under sedated patients were in the midazolam group.

References

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