

The summary result overview

All the 40 patients in group A completed the study, while 39 patients completed the study in group B, only one patient was excluded from the study due to regurgitation after LMA insertion. LMA insertion was successful at first attempt in all the patients in both groups and no harm to any of the patients. The demographic characteristics and anthropometric parameters were not different in both groups, Table 1.

The respiratory rate at baseline, 1, 3 and 5 minutes after LMA insertion were similar in both groups with no significant difference, $p=0.089$, $p=0.190$, $p=0.187$ and $p=0.14$ respectively. However, the respiratory rate was significantly higher in group A than group B patients at 10, 15, 20, 25, 30 and 35 minutes after induction of anaesthesia, $p < 0.05$. There was no significant difference at 40 minutes after LMA insertion till the surgery was concluded ($p>0.05$), Table 2.

The incidence of apnoea after LMA insertion was significantly higher in the propofol-fentanyl group compared with the ketamine-fentanyl group, 33 (84.6%) patients versus 26 (65%) patients, $p=0.045$. However, the mean duration of apnoea was similar in both groups, 62.31 ± 23.88 s versus 68.18 ± 32.06 s respectively for groups A and B, $p=0.439$. Apnoea was observed only after the administration of the study drugs for induction of anaesthesia and before LMA insertion. Moreover, prolonged apnoea (>120 seconds) was not observed in both groups throughout the surgery, Table 3.

Statistically significant proportion of patients in group B achieved full mouth opening during LMA insertion, 34 (87.20%) versus 14 (35%) patients, $p=0.006$; but proportion of patients with partial mouth opening was higher in group A than B, 26 (65%) versus 5 (12.80%) patients, $p<0.001$, Table 4. LMA insertion conditions were scored and categorized as excellent (score of 18), satisfactory (scores of 16-17) and poor (score <16), Table 5.

None of the patients in the two groups coughed after the LMA insertion. Swallowing was absent in 34 (85.0%) patients in group A compared with 38 (97.4%) patients in group B, $p=0.724$; proportion of patients with slight swallowing was comparable between the two groups, with 6 (15%) patients (group A) versus 1 (2.6%) patient (group B), $p=0.131$ (Table 4)

Patient movement was absent in 28 (70%) patients versus 34 (87.2%) patients in groups A and B ($p=0.525$); moderate patient movement was not also significantly different in groups A and B, 12 (30%) patients versus 5 (12.8%) patients ($p=0.146$); but vigorous patient movement was not observed throughout the study period (none of the 40 patients in group A and 39 patients in group B experienced vigorous movement) $p=1.000$. Proportions of patients with easy, difficult, and impossible LMA insertions were comparable in groups A and B: 36 (90%) patients versus 38 (97.4%), $p=0.908$; 4 (10%) patients and 1 (2.6%) patient. $p=0.37$; and 0 (0%) versus 0 (0%) patients respectively (Table 5).

While patients were in the post anaesthetic care unit and 30 minutes after removal of the LMA, all the 40 (100%) patients in group A and 37 (94.9%) patients in group B met the discharge criteria (modified post anaesthesia discharge scoring system), $p=0.241$. At 45- and 60 minutes post LMA removal, all the patients in both groups scored at least 9 on the modified post anaesthesia discharge scoring system and were discharged, Table 6.

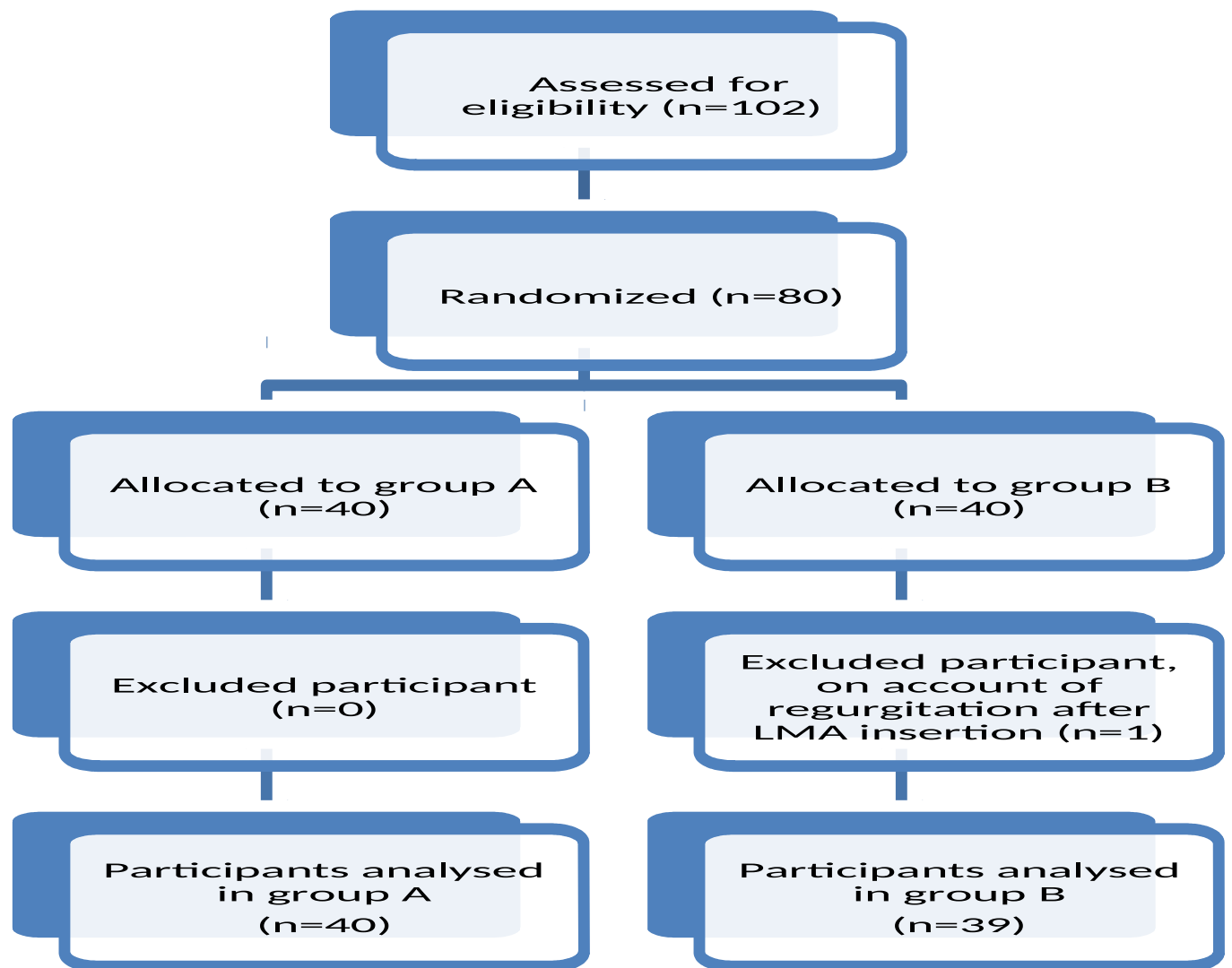


Figure I: CONSORT diagram

Adverse event: No adverse event to all patients

Outcome measures: Laryngeal mask airway insertion conditions and incidence of apnoea were assessed as primary outcome measures, while post anaesthetic discharge score was assessed as secondary outcome measure.