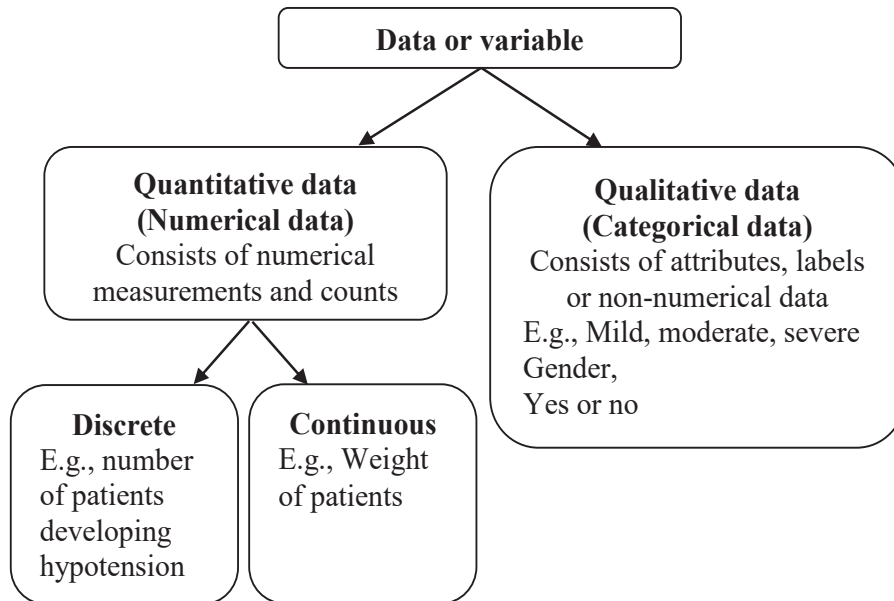


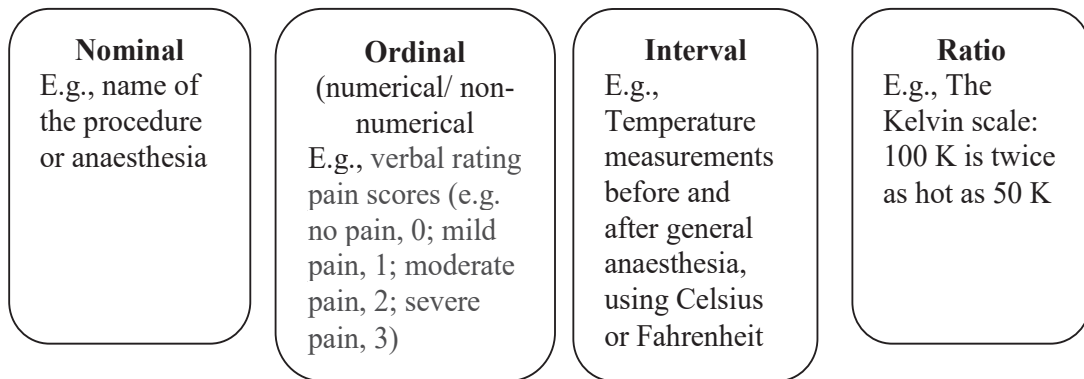
Supplementary file 3A: Data classification.

Data can be classified in 3 ways,

1. Based on variable



2. Based on levels of data measurement



3. Other types of classifications

Interval and categorical data

Interval data: continuous and quantitative; a subtype of interval data is integer data.

Categorical data: discrete and qualitative; comprise two subtypes: nominal and ordinal.

Supplementary File 3B: Distribution Analysis

There are different ways to inspect the data; use of frequency distribution table, use of a scatter plot etc. By visualising the plots, one can check for skewed data or an outlier that exists. The data can be normally distributed or may follow a skewed pattern. Though it is required to check and report the distribution for every parameter and outcome of

the respective group, the findings can be made concise. For example, one can write as ‘*all demographic data and baseline vitals were analysed for distribution using Shapiro-Wilk test and found normally distributed*’. If a specific parameter recorded data is abnormally distributed, one can consider a graph to depict it and cite it in the text, as ‘*all demographic data and baseline vitals were analysed for distribution using Shapiro-Wilk test and found normally distributed*’; however, a skewed distribution for opioid use is observed (Shapiro Wilk test, $P = 0.003$, Figure 1).’ The commonly used normality tests are the Kolmogorov Smirnov test, Anderson-Darling test, D’Agostino and Pearson omnibus test or Shapiro-Wilk test. The P -values for each group are noted and decision on parametricity is taken.

Supplementary file 3C. The pattern example for writing statistical methods used in thesis section ‘Methods’.

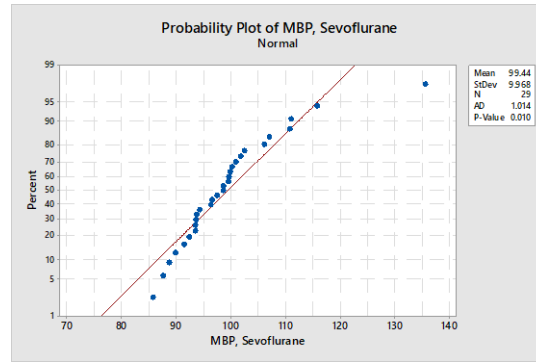
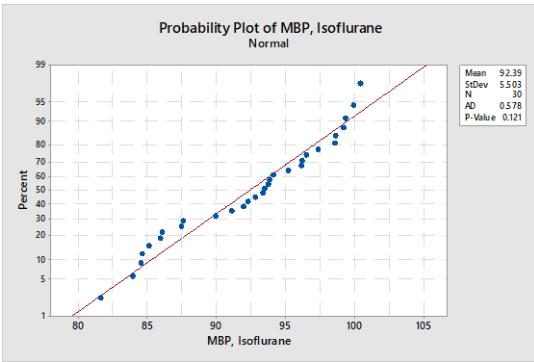
‘The investigated parameters were assessed for normality of distribution using Shapiro-Wilk test. Data are expressed as mean (SD), median (IQR) and in proportions (%). Numerical data such as age, weight, BMI, MBP are compared between the groups, using independent sample ‘t’ test. Categorical data such as gender distribution, type of surgery, incidence of nausea and vomiting are analysed using test of proportions or Chi-square test. For non-parametric data of any parameter studied, appropriate non-parametric test (here, Mann-Whitney U instead of t test) is used. Statistical significance was set at $P < 0.05$ (2-tailed). All statistical analysis were performed using Prism 5, Version 5.03, GraphPad Software, Inc. USA.’

Supplementary file 3D. The pattern example for writing text description of ‘Results’ section, in the first paragraph.

‘Of 63 patients who underwent shoulder arthroscopic surgeries, 1 patient who refused interscalene block on operative table did not meet the inclusion criteria. Five patients who had a different operating team were excluded prior to randomisation. The remaining 57 were analysed as per protocol (CONSORT flow diagram). The groups did not differ by age, sex, weight, and pre-induction opioid use. Baseline vitals were comparable. Both groups received similar anaesthetic techniques with respect to regional or general anaesthesia. Surgical details with respect to type of surgical procedures, induction–incision time, surgical duration, initial pump pressures, and flows were comparable between the groups, Table 1.’

Supplementary file 3E. The example of a figure (and its presentation) showing distribution analysis of data. . In the presented figure, a skewed data of baseline mean blood pressure readings for sevoflurane patients is observed.

Data distribution analysis for mean blood pressure of isoflurane and sevoflurane subjects. Anderson darling test was used for analysis for each group. x-axis represent the mean blood pressure (mm of Hg). y- axis represent the percent of population. Note the outliers in second image and its P-value, which is statistically significant. Abbreviations: AD = Anderson Darling test; MBP = mean blood pressure; N = number of patients per group; StDev = standard deviation.



Supplementary file 3F. The pattern example for writing text description of ‘Results’ section, in the subsequent paragraph, especially for primary outcomes. Different patterns can be chosen accordingly.

Before AVP administration, (but post-induction baseline), jugular venous oxygen saturation did not differ between groups (mean difference -5.0% , 95% confidence interval [CI], -13.1% to 3.1% ; $P = 0.26$, Table 1)

Pain scores did not differ at 6 hours with rest (mean \pm SD, n; Group A, 2.0 ± 1.1 , 57 vs Group P, 2.1 ± 1.2 , 53; mean difference [95% CI of mean difference], $0.1 [-0.33$ to $0.53]$; $P = 0.649$) and with movement (Group A 1.6 ± 0.6 , 57 vs Group P 1.5 ± 0.8 , 53; $0.1 [-0.37$ to $0.17]$; $P = 0.458$, Table 1)

The primary outcome, the number of subjects requiring additional uterotonics, was similar in patients who received the oxytocin bolus (29%) compared with patients receiving the saline bolus (40%), ($P = 0.11$; odds ratio 1.65, 95% confidence interval [CI] $0.82-3.31$, Table 3).

The primary end point of pain scores with active knee flexion in the operated knee at 24 h after surgery was significantly reduced in Group A compared with Group B (3 [IQR, 2.75–4.25, n = 55] vs 5 [IQR, 4–6, n = 58], $P < 0.001$), (Table 2).

Supplementary file 3G. The pattern example for writing text description of ‘Results’ section, in the subsequent paragraph, especially for secondary outcomes.

‘The time until breakthrough pain (NRS > 3) was significantly longer in Group A than that in Group B (18.5 [IQR, 4–46] hours (n = 44) vs 10.0 [IQR, 3–24] hours, n = 45, $P = 0.002$) (Table 2).

After writing important secondary outcomes, subsequent presentation can be as follows for unimportant ones, when many secondary outcomes has to be presented in text.

‘In addition, NRS pain scores at rest and with movement at 8, 12, 24 and 48 hours after surgery (Figures 2 and 3), and rate of patients with NRS > 3 with movement within 24 and 48 hours postoperatively were significantly lower in Group A than in Group B ($P = 0.01$, Table 2).’

Supplementary file 3H. The pattern example for writing text description of ‘Results’ section, in the subsequent paragraph, especially for secondary outcomes and subgroup analysis.

1. *‘There was no difference between the groups in cumulative opioid consumption (milligrams of morphine equivalents) at 3, 6, 10, or 12 hours or the time to the first analgesic. The incidence of nausea was significantly higher in the A group at 6 hours, but there were no other differences in the incidence of opioid-related side effects. ; two patients out of 52 developed an episode of headache.’*

2. *Subgroup analyses of rest and movement pain for only patients who received a femoral nerve block are depicted in Figures 1 and 2, respectively. These analyses found that the A and B groups reported an equivalent rest and movement pain scores for all-time intervals’*
