SE and RE-SE difference (RE-SE), heart rate, and blood pressure were recorded before induction of anaesthesia and immediately after the target ET sevoflurane concentrations. The ratios of blood pressure and heart rate at the different times were calculated relative to the preoperative values. For the haemodynamic variables, ratios of < 0.85 or > 1.15 were regarded as clinically significant.

**Results**
There was a significant change in RE (p < 0.0001), SE (p < 0.0001) and RE-SE (p = 0.0006) at the different sevoflurane concentrations. No RE-SE > 10 was recorded at sevoflurane more than 1%. No SE > 60 was recorded at a sevoflurane concentration of 3%. No correlation was found between entropy and haemodynamic ratios.

**Conclusion**
The main findings of this study was that an end-tidal sevoflurane concentration of > 2% rendered unconsciousness in all patients (SE less than 60, RE-SE less than 10). The depth of anaesthesia did not guarantee absence of haemodynamic response to noxious stimuli.

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**A Clinical Comparison of Disposable Airway Devices**

CS Strydom, PJ le Roux

The re-usable Classic laryngeal mask airway (LMA®) is widely used. There are concerns regarding the transmission of pathogens. Disposable masks provide a cost-effective alternative. We performed a side-by-side clinical comparison of these devices applicable to the South African context.

**Methods**
Adult ASA 1-3 patients (30-100 kg) presenting for elective peripheral surgery in Tygerberg Hospital were randomized by drawing of sealed envelopes, to receive the gold standard Classic LMA, or one of 4 disposable devices. They all received a standardized anaesthetic with propofol, fentanyl and isoflurane in 40% O₂/N₂O. Insertion technique, mask sizes and maximum cuff volumes were per manufacturers instructions. The cuff was inflated to achieve an adequate airway seal (no audible leak at an airway pressure of 20cmH₂O), or to the maximum recommended volume. Cuff and airway pressures were measured continuously. A protocol was followed for repeated or failed attempts.

**Results**
To date, 29 of the proposed 130 patients were recruited. Data was analysed using one-way ANOVA.

The patients were of comparable age, weight, ASA grade and airway grading.

There were no statistical differences in the number of size changes (p=0.508), ease of insertion (p=0.152), insertion time (p=0.908) or insertion attempts (p=0.127). Cuff volumes (p=0.206) and cuff pressure (p=0.083) were similar. Airway trauma as graded by visible blood on the device was low, and similar between groups (p=0.688). There was no difference in the amount of suctioning required (p=0.237). Patient comfort was exceptional and comparable, achieving similar visual analogue scores for sore throat (p=0.875), dysphagia (p=0.846) and hoarseness (p=0.364). No complications were noted.

We found no difference in clinical practice between the Classic LMA®, Disposable LMA®, CobraPLA ™, Portex Soft Seal Laryngeal Mask (PLA) and Ambu mask in terms of ease of insertion, patient comfort, airway trauma or adequacy of airway seal.

This is an ongoing study. Updated results will be presented.