

A Research on “Cost efficiency of target controlled inhalational anaesthesia” by Dr Laxmi Kamat was published in “Acta Scandinavica Anaesthesiologica”.

Background :

Cost and environmental pollution are two prime concerns with general anaesthesia. Target controlled anaesthesia drug delivery system also called as end-tidal (ET) control is an effective and safe system that would reduce the cost and also the environmental pollution.

Methods We studied 200 patients undergoing laparoscopic abdominal surgeries and randomly distributed them in 2 groups of 100 each target controlled (TC) and manual controlled (MC) group. We reviewed the 2 groups in term of consumption of gases, time required to achieve the end tidal concentration of sevoflurane and no. of adjustments required to maintain the depth of anaesthesia.

Results :

We found that the consumption of nitrous oxide and sevoflurane were significantly less in TC group than MC group P -value <0.05 , oxygen consumption was also less in TC group but not statistically significant. The time required to achieve the desired levels, maximum inspired sevoflurane concentration achieved and the number of drug delivery adjustments required were statistically significant in TC group P -value <0.05 . As the consumption reduced in TC group the cost of the anaesthesia reduced by approximately Rs 62/hr and thus the environmental pollution.

Conclusion :

We concluded from our study that ET control is a good system for conserving the consumption of gases and thus is efficient as it reduces both the cost and the environmental pollution.