The Effect of Thiopentone 2 mg/kg and Succinylcholine 0.5 mg/kg in Modified ECT

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The key of anesthetic management for ECT is to carry out the patient from suffering during ECT treatment, but less interfere to siezure threashold to obtain the therapeutic range of siezure'stime (25-60 seconds).
This procedure needs and experienced person, but practically is being assigned to anyone available. Because, in general ECT considered as a short, simple procedure should need a simple anesthetic management.
This study aims to set the specific protocol of anesthetic management, easy to follow, but obtains an effective psychiatric treatment along with patient's safety and comfort.
The most familiar drugs, thiopentone and succinylcholine were selected as an IV sedation of choice. Subinduction dose of thiopentone (2 mg/kg) followed by subintubation dose of succinyl choline (0.5 mg/kg) along with 100% oxygen by mask were desired for this study in 90 ECT treatment. Monitoring were carried out with NIBP, ECG, pulse oximeter. Siezure's activity and time were observed.
We found that, these selected drugs and doses yeil satisfactory therapeutic range of siezure's time around 70%. Poor responese by siezure's time less than 25 seconds which may lead to ineffective ECT treatment occurred up to 30%. SpO2 maintained more than 90% in most of the patients.
Side effect on cardiovascular by increasing BP and HR more than acceptable range (> 20% from base line) was around 30%. Beta blockade or IV calcium chanal blocker treatment instead of increasing dose of thiopentone is suggested. No other undesirable effects such as awareness, headache, nausea, vomiting etc were found in this study.
Conclusion : Thiopentone 2 mg/kg followed by succinylcholine 0.5 mg/kg along with O2 supplement is recommended as a save and suitable IV sedation for ECT.