USE OF DEXMEDETOMIDINE COMBINED WITH LOCAL ANESTHESIA FOR TREPANATION AND EVACUATION OF CHRONIC SUBDURAL HEMATOMA

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BACKGROUND

Chronic Subdural Hematoma (CSDH) is a very common clinical entity in neurosurgery among patients >80 y.o. , ASA III , which requires high level of sedation, and is usually performed under monitored anesthesia care (MAC). Dexmedetomidine is a selective α_2 -agonist that provides sedation without respiratory depression and has analgesic properties.

GOAL OF STUDY

The aim of our study was to investigate the effectiveness of dexmedetomidine as sole sedative agent during evacuation of CSDH and to evaluate patients' comfort and surgeons' satisfaction.

METHOD

Twenty patients received omeprazole 40mg and dexamethasone 8mg (iv) prior to the procedure and a loading dose of dexmedetomidine 1 μ g/kg over a period of 10 min, followed by continuous infusion of 0,7-1,2 μ g/kg/h.

By the end of the loading dose, 4-5ml of a local anesthetic agent (Ropivacaine 0,5%) were infiltrated subcutaneously in the Burr Hole. Standard monitoring was recorded and supplemental O₂ (4lt/min) through a face mask was administered.

RESULTS

All the patients succeeded the desired level of sedation (RSS>3, responded only to verbal commands). All of the patients remained hemodynamically stable, no significant respiratory depression was noticed and no supplemental medication was required. Recovery was easy, safe and recovery time was reduced compared to general anesthesia.

CONCLUSIONS

Dexmedetomidine proved to be a good choice for the management of patients undergoing CSDH under local anesthesia and an ideal sedative agent, providing high level of MAC.