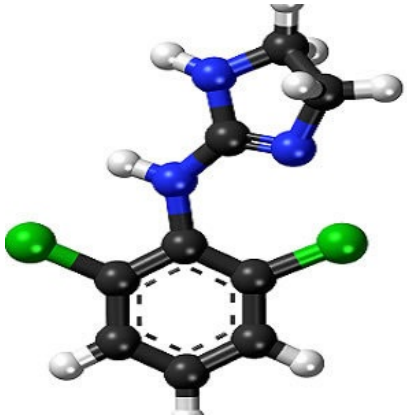
ICU
MANAGEMENT & PRACTICE

Clonidine for Sedation in the Critically Ill



According to a systematic review and meta-analysis, there is insufficient data to support the routine use of clonidine as a sedative in the mechanically ventilated population.

See Also: Towards Safer Ventilation in Critically ill Patients without ARDS

Patients who are critically ill and on invasive mechanical ventilation (IMV) often require sedation to minimise discomfort and the risk of self-injury as well as facilitate care. Previous studies have already shown benefits of minimising sedation which include a reduction in the duration of mechanical ventilation, shorter length of stay in the ICU and an overall improvement in survival.

The most commonly used sedatives in patients requiring IMV include propofol, benzodiazipines and dexmedetomidine. However, evidence supporting the use of clonidine in such patients still remains scarce.

A recent systematic review on the efficacy of clonidine in the paediatric, critically ill population concluded that robust evidence for its use is still lacking. In addition, the 2013 Pain, Agitation and Delirium guidelines also do not make any recommendations on the use of clonidine in ventilated critically ill patients.

During this systematic review, the researchers aimed to summarise available RCT evidence on the use of clonidiene as a sedative in the ICU in order to provide better information to clinical practitioners. For the purpose of this review, they performed a search of MEDLINE, EMBASE, CINAHL and the Cochrane trial registry. A total of eight RCTs met the exclusion criteria and were included in the final analysis. Of the 8, clonidine was administered intravenously in 6 trials and enterally in the remaining two.

Findings showed no difference in ICU mortality between the clonidine and non-clonidine group. There was also no difference in the duration of sedation infusions between the clonidine and non-clonidine groups. The dose of narcotics was significantly reduced in the clonidine group as compared to the non-clonidine group.

There was also no difference in the level of sedation achieved in the clonidine group as compared to the non-clonidine group. Similarly, no difference was observed in the incidence of withdrawal from other sedatives between the groups. Due to lack of insufficient data, the researchers were unable to comment on the incidence of delirium.

No significant difference was found in the length of ICU stay or hospital stay between the two groups. However, an increased evidence of clinically significant hypotension which required intervention was evident in the

clonidine group as compared to the non-clonidine group. No difference in the incidence of clinically significant bradycardia requiring intervention was observed.

Overall, the researchers did not find any significant difference in the duration of IMV, ICU mortality, duration of sedation infusion or ICU length of stay between the clonidine and non-clonidine groups. They conclude that the most important role of clonidine could be as an adjunctive or sedative sparing agent as the drug reduces the dose of narcotics required. But its use as a stand-alone sedative still remains unclear.

Source: Critical Care
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