Sedo-Analgesia in Neurologically Ill Patients: Guidelines Revisited

To the Editor:

We read with great interest the recent guidelines for the management of spontaneous intracerebral hemorrhage in adults developed by Broderick et al.1 First of all we want to congratulate the authors for their excellent review about the appropriate management of these neurologically ill patients, but we would like to make some comments. When we read the section concerning the sedatives and analgesics drugs, we remained worried due to the recommendation of etomidate as a useful sedative for these patients.

We absolutely agree with the importance of an adequate sedo-analgesic regimen. However, we must remember that a suitable sedo-analgesic regimen is as important as the correct election and dosage of the drugs we use. If we consider this, we will be able to avoid potential undesirable effects that increase morbidity and mortality of our patients.2,3

In 1983, Ledingham et al4 observed that continuous intravenous administration of etomidate to trauma patients increased their mortality. Authors concluded that this excess of mortality could be due to the suppression of adrenal steroidogenesis related to the inhibition of corticosteroidogenesis by etomidate administration. One year later, the same authors published a retrospective review of 428 severely injured patients where sedo-analgesic regimen was revisited. Authors found that mortality of patients sedated with etomidate was 77%, but only 28% if the chosen sedative was midazolam. After discontinuation of etomidate use and resumption of midazolam as elected sedative the mortality fell to 25%.5 For that reason, the use of etomidate even during short periods of time must be avoided.6

At the present time, etomidate must only be used as part of rapid sequence intubation because of its favorable hemodynamic profile. Even in this situation, we must cautiously evaluate its use in some critically ill patients.7

With reference to the analgesia regimen, the authors recommend the use of morphine and alfentanil for analgesia and an antitussive effect, leaving aside another important opioid derivative of fentanyl, remifentanil. This opioid due to its pharmacokinetic profile confers a clear advantage over the mentioned opioids in the guidelines because of easy titration, to reach the desired effects quickly, and especially because when we decrease or halt the infusion a rapid neurological examination is warranted.8 This profile makes it the perfect combination with propofol for those patients who need this attitude.

In addition, because it possesses sedative effects at higher doses (6 to 12 mg/kg per hour), we could decrease the dose of propofol to maintain the patient adapted to the mechanical ventilation, and thus to attain a greater security margin in patients who need potentially dangerous doses of propofol (next to 5 mg/kg per hour).

To conclude, we want to remember again that etomidate does not have to be used by continuous intravenous drip, not even during short periods of time. Etomidate can be used for rapid sequence intubation in selected patients. About analgesia, the use of remifentanil is an attractive combination along with propofol in those neurologically ill patients who need frequent evaluations.

Disclosures

None.

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