

diac enzyme determinations, suggests that the myocardium may have been protected during coronary artery clamping and cardiac standstill.

Finally, Dr. Lennon misinterpreted our rationale for using adenosine in this patient. We did not give adenosine for the purpose of preconditioning. After we were unable to effectively decrease the patient's heart rate with esmolol, we gave adenosine for the sole purpose of providing intermittent, brief periods of cardiac standstill so that the surgeons could complete the anastomosis. As we stated in our discussion, there are no reports that suggest that intermittent cardiac standstill produced by the administration of adenosine mimic ischemic preconditioning.

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## Value of Presenting the Time-course of Pain Relief in Analgesic Trials

*To the Editor:*—We read with great interest the study by Gautier *et al.*<sup>1</sup> in the March issue of ANESTHESIOLOGY. Clinical trials to evaluate the interactions of analgesics at the spinal cord level are very important. Gautier *et al.* present only the maximum pain relief score, the time at which this occurred, and the duration of adequate analgesia (*i.e.*, time to first analgesic request after intrathecal injection). However, two agents that share these three parameters may not be equally effective (as illustrated in figure 1 using hypothetical data). A similar comprehensive description of side effects may be useful in analyzing their incidence and severity. Furthermore, such analysis may provide useful information on possible synergistic or additive interactions between sufentanil and clonidine in this particular clinical setting.

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### Reference

1. Gautier PE, De Kock M, Fanard L, Van Steenberghe A, Hody J-L: Intrathecal clonidine combined with sufentanil for labor analgesia. ANESTHESIOLOGY 1998; 88:651-6

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### References

1. Borges MF, Spohn PK, Coulson AS: Arrhythmias/ischemia management during minimally invasive cardiac operation. Ann Thorac Surg 1997; 64:843-4
2. Jacobsohn E, Young CJ, Aronson S, Ferdinand FD, Albertucci M: The role of ischemic preconditioning during minimally invasive coronary artery bypass surgery. J Cardiothorac Vasc Anesth 1997; 11: 787-92

(Accepted for publication July 30, 1998.)

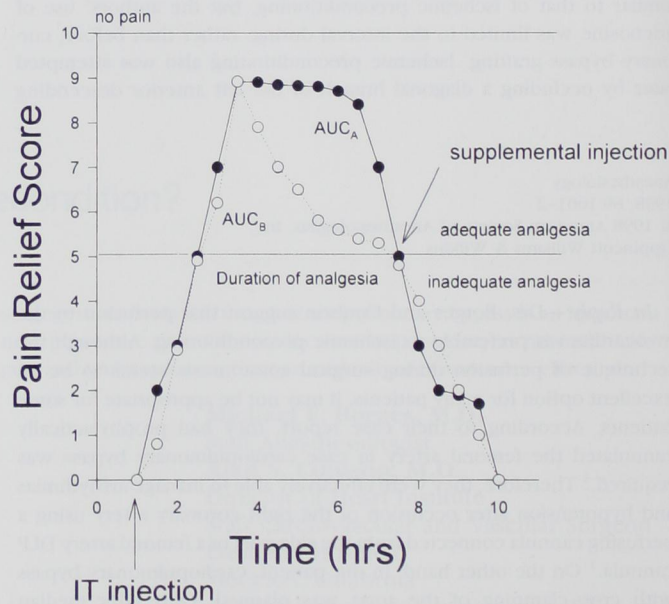


Fig. 1. Pain relief scores for two drugs, "A" (●) and "B" (○). Both drugs have identical onset, peak effect, and duration of action until supplemental analgesia is needed. Note, however, different areas under the curve (AUC) of pain relief above threshold versus time.