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Central Action of Spinal Opiates

To the Editor:—Recent work and our own experience has shown that central effects including respiratory depression, vomiting, and facial analgesia can occur when opiates are injected in humans into the cerebrospinal fluid at a lumbar interspace.¹ This finding in humans contrasted with animal studies. However, the only animal model where central effects were evaluated was the Yaksh model² where a cannula was inserted through the cisternal membrane and fed caudally. This cannula may have caused partial obstruction to free dispersion of the drug to the respiratory centers. Obstruction is likely to be maximal in the cervical region where the spinal cord is thickest.

Recently an investigation into the action of droperidol and spinal morphine in the rat was published.³ We would like to draw attention to the modification in the technique used. In this investigation the cannula was inserted directly by laminectomy near the appropriate region, allowing free cephalad dispersion of the drugs, though in this case central effects were not evaluated. As clinicians we felt that one of the main reasons preventing widespread use of spinal narcotics in humans is the occurrence of central effects. Further research including work with animals is required and we suggest that investigation of central ef-

fects would be carried out best with this newer approach to delivery of spinal narcotics.

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REFERENCES

1. Davies GK, Tolhurst-Cleaver CL, James TL: Respiratory depression after intrathecal narcotics. *Anaesthesia* 35: 1080–1083, 1980
2. Yaksh TL, Rudy TA: Studies on the direct spinal action of narcotics in the production of analgesia in the rat. *J Pharmacol Exp Ther* 202:411–428, 1977
3. Kim KC, Stoelting RK: Effect of droperidol on the duration of analgesia and development of tolerance to intrathecal morphine. *ANESTHESIOLOGY* 53:S219, 1980

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Two New Drugs Improve Anesthetic Management in Obstetrics

To the Editor:—We congratulate Drs. Datta and Alper on their excellent and comprehensive review “Anesthesia for Cesarean section.”¹ Two recent papers from this department are relevant to that article. Firstly, we have demonstrated that domperidone, another new D₂ dopaminergic receptor antagonist,² has a similar constricting action on the lower esophageal sphincter to metoclopramide.^{1,3,4} However, domperidone offers the potential advantage in that it fails to cross the blood-brain,⁵ and possibly also the placental barrier, making the drug less likely to cause undesirable side effects in the fetus.

Secondly, etomidate, a new imidazole derivative, in our hands has proved the only intravenous induction agent superior to thiopentone at elective Cesarean sec-

tion,⁶ a finding recently confirmed by other researchers.^{7,*}

We believe these two new drugs worthy of consideration in the preparation of patients for, and induction of, obstetric anesthesia and accordingly commend them to your readers attention.

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