i.m. instead of i.v. infusion. However, their results in no way justify their statement that meptazinol is “less potent than pethidine”. The slightly greater rate of use of meptazinol produced a mean pain score of 38 as opposed to 52 for the patients who received pethidine. Indeed, meptazinol may well be more potent than pethidine in doses smaller than 100 mg.

It is obviously essential that relative potency should be related to a single dose, or level of response, but it is incorrect to use the method of Harmer and co-workers (1983), who related doses of morphine, buprenorphine and meptazinol to pethidine 100 mg. As these relationships were obtained by division of 24-h dosage, they may bear no resemblance to those obtaining at the level of response to pethidine 100 mg. These relative potencies should, like others, only be used in the context in which they were obtained.

B. Kay
Manchester

REFERENCES


Dr Kay is probably correct in saying that equipotency ratios for analgesia should not be compared with the effects of a single dose on respiration. However, most patients receive multiple doses of analgesics, so that the practical question is whether a range of different prescribed doses could have effects on ventilation akin to the agonists pethidine and morphine. This seems at least possible.

Dr Kay alleges that comparing potency by a patient demand technique is generally unreliable. However, determinations of equivalent potency for buprenorphine and pentazocine (Slattery et al., 1983) pethidine and meptazinol (Slattery et al., 1981) and now morphine, pethidine and nalbuphine (Bahar, Rosen and Vickers, 1984), fall within generally accepted ranges. The consistency shown does not support the view that estimates based on self-administered regimens are “full of pit-falls”. It is possible that meptazinol is the exception and some of the problems may lie in its lack of efficacy. In a small study of 10 mothers in labour, using self-administration by the i.m. route, meptazinol was 1.5 times less potent than pethidine, and three of five mothers receiving meptazinol asked for an extradural block in future: none of the five receiving pethidine did so.

M. D. Vickers
Cardiff

BRONCHOSPASM AND HYPOTENSION FOLLOWING CARDIOPULMONARY BYPASS

Sir,—The case of bronchospasm and hypotension following cardiopulmonary bypass reported by Drs Durant and Joucken (1984) raises several interesting points.

The authors describe the rarity of this phenomenon, with a reported incidence of four cases worldwide. In the recent experience of this hospital there have been three cases of sudden massive increase of airway pressure (>40 cm H

Dr Kay maintains that relative potency should be related to a single dose or level of response. That was so in our study. The response was obtained when the patient titrated himself to optimum analgesia with the study drug, balancing pain relief against side effects. Each patient was at liberty to keep pain relief optimal all the time.

REFERENCES
