

Correspondence

Perineal pruritus after the administration of iv dexamethasone

To the Editor:

We, too, have noticed the phenomenon described by Perron *et al.*¹ after a bolus injection of dexamethasone 8 mg *iv*. Our strategy to prevent this is to administer the dexamethasone immediately after the induction of general anesthesia. However, this might limit the efficacy of dexamethasone to prevent postoperative nausea and vomiting (PONV). The article by Wang compares the administration of dexamethasone before induction and at the conclusion of the anesthetic.² It does not take into account the administration of dexamethasone at any other time in the course of the anesthetic. This article is the only one which is quoted in the recent "Consensus guidelines for managing postoperative nausea and vomiting"³ with regard to the timing of the dose of dexamethasone. While Wang *et al.* conclude "the prophylactic *iv* administration of dexamethasone immediately before the induction, rather than at the end of anesthesia, was more effective in preventing PONV," I suspect that our technique is as effective as administering the drug before induction while avoiding this unpleasant side effect.

In Wang's study, late (2 to 24 hr postoperatively) PONV was reduced similarly by the administration of dexamethasone at the beginning or at the end of anesthesia, suggesting that the drug remains effective despite a later administration. Future studies should determine whether delaying its administration by a couple of minutes truly limits its efficacy to prevent PONV.

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References

- 1 Perron G, Dolbec P, Germain J, Bechard P. Perineal pruritus after iv dexamethasone administration (Letter). *Can J Anesth* 2003; 50: 749–50.
- 2 Wang JJ, Ho ST, Tzeng JI, Tang CS. The effect of timing of dexamethasone administration on its efficacy as a prophylactic antiemetic for postoperative nausea and vomiting. *Anesth Analg* 2000; 91: 136–9.
- 3 Gan TJ, Meyer T, Apfel CC, *et al.* Consensus guidelines for managing postoperative nausea and vomiting. *Anesth Analg* 2003; 97: 62–71.

REPLY:

We would like to thank Dr. Crandell for his interest and comments regarding perineal pruritus after *iv* dexamethasone administration.¹ We agree with the fact that administering dexamethasone immediately after the induction of general anesthesia is probably as effective as administering it before induction. Since our report, we adopted the same strategy of giving dexamethasone after the induction of general anesthesia to avoid perineal pruritus.

Wang *et al.* reported that dexamethasone was not effective zero to two hours after its administration, but that it proved to be effective in the following period.² This finding probably explains the lower incidence of early postoperative nausea and vomiting observed in the group of patients receiving dexamethasone before the induction of general anesthesia in Wang's study since the mean duration of anesthesia in this group was 136 min. Nevertheless, further research is needed to clarify the onset time of dexamethasone's antiemetic effect and to determine if the timing of its administration relative to induction of general anesthesia could really affect its efficacy.

Since dexamethasone may be needed in awake patients in the postanesthesia care unit, the step down recovery unit or on the ward, anesthesiologists should inject the drug slowly over five to ten minutes to prevent perineal irritation and patient discomfort.^{3–5}

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References

- 1 Perron G, Dolbec P, Germain J, Bechard P. Perineal pruritus after *iv* dexamethasone administration (Letter). *Can J Anesth* 2003; 50: 749–50.
- 2 Wang JJ, Ho ST, Tzeng JI, Tang CS. The effect of timing of dexamethasone administration on its efficacy as a prophylactic antiemetic for postoperative nausea and vomiting. *Anesth Analg* 2000; 91: 136–9.
- 3 Thomas VL. More on dexamethasone-induced perineal irritation (Letter). *N Engl J Med* 1986; 314: 1643–4.
- 4 Andrews D, Grunau VJ. An uncommon adverse effect following bolus administration of intravenous dexamethasone. *J Can Dent Assoc* 1986; 52: 309–11.