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Droperidol Reduces Nausea after Caesarean Section but Alters the Neurological Status of the Breastfed Infants

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Background & goal of study: Intravenous (IV) administration of morphine via a patient controlled (PCA) device is frequently used to provide analgesia after caesarean section (CS). Nausea associated with this technique can be reduced by adding droperidol to the morphine solution¹. However, according to the American Academy of Paediatrics, the effects of most neuroleptic drugs on the infant are unknown and their use may rise some concern². The present study was designed to assess the effects of the administration of droperidol to breastfeeding mothers on their infants.

Materials & methods: After institutional approval and informed consent were obtained, 40 pregnant women were included. All underwent a CS under regional anaesthesia and intended to breastfeed their infants. Prospectively, the mothers were randomly divided into two groups. In the first group (M), analgesia was provided by IV morphine (2 mg.ml⁻¹) administered via a PCA device. In the second group (MD), droperidol (0.083 mg.ml⁻¹) was added to the morphine solution. For three days and every 12 hours, pain and nausea were assessed using a visual analogue scale (VAS) and the number of vomiting episodes as well as morphine consumption were recorded. The neurological status of the baby was evaluated at the same times by the same blinded investigator (mw) using the NACS score³. Statistical analysis was performed using unpaired *t*-tests, two-way mixed-design ANOVA's and chi-square tests as appropriate. *P* < 0.05 was considered significant.

Results: Population characteristics were similar in the two groups. On the 1st post operative day, all recorded variables were similar in both groups except for the NACS which was higher in the M Group than in the MD Group (36 vs 34). Conversely, on the second postoperative day, nausea were significantly less frequent in the MD group than in the M group (0 vs 25 % respectively) whereas the NACS was significantly lower in the MD group (37 vs 34).

Discussion: Droperidol is very effective at preventing nausea after CS but it alters the NACS score of the infants. The clinical relevance of the latter finding remains to be determined.

References: ¹Acta Anaesthesiol. Scand. 1996, 40 : 600-605, ²Pediatrics 1994, 93 : 137-150,

³Anesthesiology 1982; 56: 340-350

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Figure 1

