

Treatment of fever and pain with paracetamol infusion after caesarean section

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Citation

M Inal. *Treatment of fever and pain with paracetamol infusion after caesarean section*. The Internet Journal of Pain, Symptom Control and Palliative Care. 2007 Volume 6 Number 1.

Abstract

We discussed the treatment of fever and postoperative pain with paracetamol infusion in a patient that entered to emergency caesarean section. Before the end of the operation paracetamol infusion started and then given four times a day as recommended. During and after the operation, fever and pain were followed. The pain scores were acceptable and fever was decreased fastly.

INTRODUCTION

Acetaminophen is an effective analgesic and antipyretic agent with few adverse effects (1).

After caesarean section, parenteral acetaminophen, opioids and NSAIDs are commonly used for postoperative analgesia (2,3).

In pregnant patients and postpartum period; paracetamol usually used for fever.

In this case report; we discussed the treatment of fever and postoperative pain with paracetamol infusion in a pregnant patient with fetal distress.

CASE REPORT

A 26 year-old, gravida 1, 31 weeks pregnant women, presented to the hospital with fever, uterine tenderness and scanty vaginal flow. She had a high-grade fever for 3 days prior to admission (38.5°C). She was first seen at antenatal clinic at 12 weeks pregnancy, and there was no abnormality detected until this presentation. Her past medical and family history were unremarkable.

On admission, her temperature was 38.5°C, blood pressure was 120/75 mmHg and pulse rate was 128/min. Fetal distress was observed.

Laboratory analysis on admission gave the following results: hemoglobin 11.9 g/dl, hematocrit 35%, white blood cells count 17,600/mm³, platelet count was 178000 / mm³.

Chorioamnionitis was identified and because of fetal distress; the patient was taken to caesarean section urgently.

In the operating, standard monitoring (ECG, SpO₂ and non-invasive arterial pressure) was used. Her temperature was 38°C. An appropriate antibiotic was begun to use and treatment continued after the operation.

Systolic, mean, diastolic arterial pressures, heart rate, temperature and pulse oximetry were recorded every 5 minutes during operation. Her maximum temperature was 38°C.

The baby had APGAR scores 9 and 10 at 1 and 5 minutes, respectively. No abnormality in newborn was detected.

After the umbilical cord was clamped, 1g/100ml iv paracetamol (Perfalgan, Bristol Myers Squibb, München, Germany) was given to the patient. She had no pain after the operation. Her temperature was 38.5°C in the recovery room. Paracetamol was given at 6-h interval. Temperature was recorded. On the same day temperature began to decrease to 37°C. The pain score on a visual analogue scale (VAS; 0-10 cm; 0= no pain and 10= worst possible pain) was maximum 5. After two days in postnatal care her temperature and leukocytosis decreased to 36°C and 7000 mm³ and there was no pain. For the next two days paracetamol infusion was used. After 10 days the patient discharged from hospital without pain and fever.

DISCUSSION

In this case report we must discuss two problems. The first

problem was chorioamnionitis and the second was pain after caesarean section.

Chorioamnionitis represents infection of the chorionic and amniotic membranes, and may involve the placenta, uterus, umbilical cord and fetus. It complicates up to 1-2% of pregnancies. The principal maternal complications of chorioamnionitis are dysfunctional labor, often leading to cesarean section, intra-abdominal infection, septicemia and postpartum hemorrhage. Fetal complications include premature labor, acidosis, hypoxia and septicemia (4).

Effective pain management is an important component of postsurgical care. Many patients, however, continue to experience inadequate pain relief (5). Despite improvements in analgesic delivery, several recent surveys have found that up to 80% of patients report moderate to severe pain after surgery (6,7,8).

Effective analgesia is important after caesarean section to provide the mother, early ambulation and discharge, hence leading to greater overall patient satisfaction.

After caesarean section, parenteral acetaminophen, opioids and NSAIDs are commonly used for postoperative analgesia (5,6).

Opioids remain the agents of choice for severe pain; however, this class of analgesics is associated with dose-dependent adverse effects such as nausea, vomiting, ileus, sedation and respiratory depression and prolong the time to readiness for discharge (7,8).

Nonopioid analgesics (acetaminophen and NSAIDs) are commonly used alone or as adjuncts to opioid-based analgesia to treat moderate to severe pain (8).

Acetaminophen has a well-established safety and analgesic profile. It has few contraindications and lacks significant drug interactions (9,10).

Perfalgan (1g/100ml) is an injectable paracetamol solution in a unit-dose form, ready for infusion. It was introduced into clinical practice in 2002.

In pregnant women and for postpartum period paracetamol was the first choice for fever and analgesia.

Iv administration of paracetamol has already demonstrated its analgesic efficiency in patients with postoperative pain following gynecologic surgery (11).

Varrassi et al (11) compared the analgesic efficiency and tolerability of propacetamol and ketorolac after gynecologic surgery. In this study they demonstrate that the relative morphine requirement of the propacetamol group was similar to that of the ketorolac group. This suggests that propacetamol is effective in the management of postoperative pain when combined with an opioid analgesic. Side effects were all similar.

After caesarean section, breast feeding was another problem. The agents must not transfer to the baby with milk. Paracetamol can be used in breast-feeding women (12).

We report the management of fever and analgesia in a pregnant woman. The patient's pain and fever were treated successfully with usage of iv paracetamol infusion. We suggested paracetamol infusion for fever and pain after caesarean section.

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