Epidural analgesia for a parturient with herpes gestationis

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A 23-yr-old parturient with herpes gestationis spontaneously delivered a normal healthy infant under epidural analgesia. She received five injections of bupivacaine 0.5 per cent over a ten-hour period. There was no infection at the lumbar region, even though her body was covered with vesicles and bullae including the face and neck. Eight months after delivery the patient still has a vesicular eruption which occurs mainly during her menses.

Une parturiente de 23 ans ayant un herpès gestationnel a accouché spontanément un enfant en bonne santé sous une analgésie épidurale. Elle a reçu cinq injections, de bupivacaine 0.5 pour cent pour une période de dix heures. Il n'y avait aucune infection au niveau de la région lombaire même si son corps était couvert de vésicules et de bulles incluant la face et le cou. Huit mois après l'accouchement, la patiente présentait encore une éruption vésiculaire qui survenait spécialement lors des menstruations.

Herpes gestationis is a rare vesiculobullous disease occurring during pregnancy or post-partum.¹ The case report described is the first reported use of epidural analgesia in a parturient suffering from herpes gestationis.

Case report

A 23-yr-old woman was admitted to the department of dermatology because of a severe pruritic blistering eruption occurring at the 32nd week of her first pregnancy. The vesicles and bullae covered all of the skin including the face and neck (see Figure). The back was less involved and the lumbar area was relatively clear of the eruption. There was no involvement of the oral and laryngeal

mucosa. The rest of the physical examination was normal except for prominent sacral and leg oedema.

Routine laboratory tests were normal except for increased white blood cell count, 23,000 mm³ of which 25 per cent were eosinophils, and hypoalbuminaemia of 26 g·dl⁻¹. No circulating anti-basement antibodies were found. Direct immunofluorescence on the perilesional skin demonstrated an intense linear deposition of C₃ along the basement membrane zone. Skin biopsy demonstrated the subepidermal blister.

The patient was treated with 40–60 mg prednisone daily with only minimal improvement. Secondary infection of the eruption with staphylococcus aureus coagulase positive was treated with cloxacillin. At the 36th week of pregnancy she was admitted to the delivery room because of uterine contractions and ruptured membranes. It was decided to allow a trial of vaginal delivery despite the blisters at the perineum, since there was a clean area for an episiotomy. Eight hours later, vaginal examination showed that the cervix was effaced and dilated and analgesia was requested. No signs of sepsis were noted. The temperature was 37.3° C, while the white blood cell count was 16,400 mm³ and blood cultures were sterile.

Before starting epidural analgesia, her blood pressure was 110/80 mmHg, pulse rate 100 beats min⁻². One liter of Ringer's lactate solution was given. The back was

FIGURE Herpes gestationis. Bullous lesions covering the entire body.

Key words

ANAESTHESIA: obstetrical;
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cleaned with betadine solution, and a Tuohy needle 18 gauge was inserted at the L₃₋₄ interspace. An epidural catheter was inserted and 6 ml of bupivacaine 0.5 per cent were injected after a test dose of 2 ml. During labour the parturient received four top-up injections of 5 ml bupivacaine 0.5 per cent. Ten hours after initiation of epidural analgesia, she delivered a normal healthy infant.

After delivery, only partial improvement of the skin lesions was noted. The prednisone dosage was tapered gradually and five plasmaphereses were performed. Eight months postpartum the patient still has a vesicular eruption which occurs mainly during her menses.

Discussion

Herpes gestationis is a rare disease, with an incidence of less than 1:50,000 pregnancies.² The case described here is the first with such a severe disease seen in our hospital in the last 40 years. The aetiology of the disease is unknown but probably it is an immune-mediated disease. Herpes gestationis appears to be mediated by an IgG antibody specific for a component of the epidermal basement membrane zone. Systemic steroids have been the mainstay of therapy since 1952.³ It should be noted that the name herpes gestationis is misleading since there is no relation to the herpes group of viruses. "Herpes" comes from the Greek word meaning "to creep." Its onset is characterized by an extremely pruritic, hive-like eruption during the latter part of pregnancy or the puerperium.

Epidural block is contraindicated when there is localized sepsis in the region of the epidural injection that might be carried to the epidural space and produce a peridural cellulitis or abscess⁴ which might result in meningitis.

In our patient the back was less involved with the disease and the lumbar area was free from vesicles, bullae and infection. So, we considered the procedure to be safe. Usually the blisters are not secondarily infected and their presence in the lumbar area is not necessarily a contraindication to an epidural block.

Facial or mucosal disease is unusual in herpes gestationis. In our patient the face was also involved so that epidural analgesia would have been used if Caesarean section had been indicated.

There are some potential problems of monitoring in these patients. As the limbs may be involved with bullae, blood pressure monitoring may be difficult. Routine taping of intravenous sites and application of ECG patches may also be difficult due to presence of bullae and alternative methods for securing these may be needed.

There is a paucity of information concerning anaesthesia in bullous diseases. Anaesthetic recommendations and precautions for epidermolysis bullosa and Stevens-Johnson syndrome have been reported⁵ and are beyond

the scope of this article. Jeyaram and Torda⁶ reported the case of epidural anaesthesia for a patient with pemphigus for cholecystectomy. This method was preferred because of the possible development of ulceration, bulla or oedema about the glottis in response to tracheal intubation. Epidural anaesthesia supplemented by intravenous ketamine was chosen also by Lavie *et al.*⁷ Intravenous anaesthesia with a ketamine-diazepam mixture was chosen for a patient with pemphigus who required eight anaesthetics over three months after sustaining a closed fracture of both legs.⁸ Drenger *et al.*⁹ reported a case of difficult intubation in cicatricial pemphigoid which is a rare variant of bullous pemphigoid.

Epidural analgesia or anaesthesia can be preferred in patients with herpes gestationis if the back and especially the lumbar area are not involved in the disease, as was so in our patient. In most cases of herpes gestationis, there is no mucosal involvement, so that general anaesthesia can also be offered for Caesarean section, or for other operations during pregnancy.

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