inexpensive and reliable way of securing the Nellcor nasal oxygen sensor.

Ronald Segstro MD
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Epidural block during labour in hereditary angioneurotic oedema

To the Editor:

One of the most serious manifestations of hereditary angioneurotic oedema (HANE) is the occurrence of an acute airway obstruction due to laryngeal oedema. Laryngeal oedema may, among other causes, be precipitated by the anaesthetist's manipulation of the upper airway (tracheal intubation). Although patients with HANE appear to follow a benign course during pregnancy,¹ fatal complications may occur secondary to tracheal intubation, and/or secondary to perineal swelling which may lead to extensive loss of intravascular volume and shock.² We would like to report a vaginal delivery in a patient with HANE that was accomplished under epidural analgesia without oedematous manifestation. V.B., a 25-year-old woman, gravida 1, par 1, was admitted at 20 weeks' gestation to our High-Risk Obstetrical Unit. Past history revealed that she had episodic bouts of swelling of the face and the lips associated, sometimes, with abdominal pain. Two years earlier she had severe recurrent attacks with laryngeal oedema and sub-occlusive syndrome. The diagnosis of HANE was made on a diminished C₁ esterase inhibitor (C₁ INH) 40 per cent of normal value, and a low C₄ level (17 mg%). In our unit clinical examination was unremarkable. Results of laboratory studies, ECG, serum electrolytes, blood urea nitrogen, creatinine, haemogram and clotting variables were all within normal limits. At 39 weeks' gestation, a lumbar epidural block was performed at the beginning of labour. The patient received two units of fresh frozen plasma. Two vials of 10,000 units of C₁ INH concentrate were available in case of an attack of laryngeal oedema. The patient delivered a 2.840 kg male infant (Apgar score 9 and 10 at one and five minutes) after four hours of labour. There was no manifestation of oedema. The patient was discharged on the 6th day post partum.

Although successful general anaesthesia with tracheal

intubation has been described in patients with HANE syndrome,^{3,4} general anaesthesia should be avoided during labour and delivery because the risk of laryngeal oedema following tracheal intubation is great, especially if emergency obstetrical procedures are necessary and the patient is not sufficiently prepared.⁵ Epidural anaesthesia avoids the dangers attendant on general tracheal anaesthesia, and this consideration pertains as well to the anaesthetic management of a Caesarean section. C₁ INH concentrate should be available in the labour room since epidural anaesthesia does not preclude the development of laryngeal and/or perineal oedema.

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Erratum

Lyew MA. "Mechanical airway maintenance."

We apologize for an error in the above letter. *Can J Anaesth* 1988; 35, 670. In the sixth line of the fourth paragraph "metal" should read "mental."

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