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Correspondence

Malignant Heating Pad

To the Editor:—Malignant hyperthermia is a dread but rare complication of anesthesia for which anesthetists must be prepared with treatment plans. Anesthetists must recognize malignant hyperthermia early by routinely monitoring patients' temperatures.

Three recent "false alarms" point to a more common cause of hyperthermia: malignant heating pad. The three patients were infants lying on heating pads covered by several sheets. Rectal or tympanic probes monitored temperature. The heating pad controls were presumably set correctly at the start of anesthesia, but were left near the foot of the operating table. Thirty minutes to 2 hours after the start of anesthesia, each patient's temperature rose rapidly. A 17-kg girl's tympanic temperature rose from 36.1 to 38.1 C within 15 minutes. Malignant hyperthermia was suggested and, in two cases, the surgeons were alerted and commotion created. The problem was overheating. The controls to one heating pad had been turned to 115 F. Temperatures of all three patients fell when warming was discontinued.

I see two lessons in these experiences. First, because man has an irresistible urge to twist, fiddle, bump and spin dials, knobs and levers, heating pad controls must be positioned next to the anesthetist (except when a flammable anesthetic is used). A very small turn raises the blanket temperature from normal to dangerous on some controls. Such overheating may cause serious burns, in addition to false alarms. Second, when on the great American plains you hear hoofbeats, it's less likely to be zebras than horses.

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Epidural Blood Patch for Post-lumbar-puncture Headache

To the Editor:—Post-lumbar-puncture headache (PLPH) has been a recurring problem since the inception of spinal anesthesia. August Bier, the father of spinal anesthesia, had the first reported PLPH in 1898. In 1960, Gormley reported that the epidural injection of 2–3 ml of autologous blood at the site of the dural puncture relieved PLPH by forming a gelatinous tamponade which sealed the dural opening.[1] DiGiovanni confirmed this effect and offered an anatomic and physiologic explanation for its success.[2,3]

The Society for Obstetric Anesthesia and Perinatology undertook a prospective study of the effectiveness and safety of epidural blood patch (EBP) for the treatment of PLPH. Reports on 185 patients have been received. Eighty-two were described on formal data sheets, while 103 were reported informally by personal narratives.

The patients were 26.7 ± 0.9 (mean ±SE) years old. The needle size used in the dural puncture was reported in 84 cases: 16-, 17-, or 18-gauge—34 patients; 22-gauge—31 patients; 25- or 26-gauge—19 patients.

Headache was first noticed 25.7 ± 2.0 hours following dural puncture. EBP was performed 4.1 ± 0.5 days after the onset of PLPH and reflected the failure of conservative therapy such as bed rest, increased hydration, analgesics, abdominal binders, and caudal or epidural injection of saline solution. All patients had headache immediately prior to treatment.

RESULTS

PLPH was completely and permanently relieved in 182 of the 185 patients (98.4 per cent) within 24 hours of EBP. An average of 9.7 ± 0.4 ml of autologous blood was in-