

right, less severe when she was supine. On the third postpartum day an epidural blood patch was performed at the L3-4 interspace using 8 ml autologous nonclotted fresh blood, with immediate and complete resolution of the headache. The patient was discharged without further complication.

Rapid drainage of at least 10 per cent of cerebrospinal fluid volume (approximately 20 ml) in standing human volunteers will produce immediate headaches.² This was clearly not the case in our patients. Abram and Cherwenka believe subarachnoid injection of air during attempted epidural cannulation was the etiology of the headaches they reported,¹ and this seems the most likely cause of the headaches we observed. Discussions with our colleagues suggest that the phenomenon of acute lumbar-puncture headache is probably more common in the obstetric population than previously recognized.

Anesthesiology
52:101, 1980

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(Accepted for publication July 31, 1979.)

Enflurane Antiarrhythmic Effect Documented

To the Editor:—Williams and Sone¹ initiated their study on the premise that no one had demonstrated any difference in the incidences of arrhythmias in man anesthetized with halothane and enflurane and undergoing surgical procedures. Such is not the case. Dr. Reisner and I determined the incidences of ventricular arrhythmias with and without exogenous epinephrine administration in a group of patients anesthetized with halothane or enflurane and undergoing gynecologic, oral, otolaryngologic or neurologic operations.^{2,3} There were 100 patients in each of the four groups. We found the incidences of ventricular arrhythmias to be 3 per cent in the halothane control group, 7 per cent in the halothane-epinephrine group, 0 per cent in the enflurane control group, and 1 per cent in the enflurane-epinephrine group. Like Williams and Sone, we concluded that the incidence of cardiac arrhythmias is significantly less when enflurane is used.

Anesthesiology
52:101-102, 1980

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(Accepted for publication August 20, 1979.)

DSA System Misleading

To the Editor:—The device that Fleming and Smith¹ have called the density-modulated spectral array (DSA) is essentially a slow-speed on-line recorder of frequency analyses. Automatic gain control of the input signal is both a feature and a limitation of that system, with its inherent loss of all information on the overall amplitude of the electroencephalogram (EEG). Therefore, this device displays proportional amounts of EEG

frequencies but not the total amount of electrical cortical activity. Frequency analysis alone gives a limited view of cerebral activity²⁻⁴ because of the possibility of fast activity remaining even at deep levels of anesthesia² or, in some cases, brain damage (e.g., "alpha" coma). Consequently, the DSA is not sufficiently reliable for routine clinical use, a limitation admitted by the authors. An alternate, simplified EEG mon-