jected. The three failures may have resulted from an inadequate volume (6 ml) of blood used for the patch (one patient), failure to place the autologous blood in the epidural space (one patient), or wrong diagnosis (one patient).

Four patients had backache or "stiff back" for 24–30 hours after the EBP. Transient side-effects which disappeared within minutes of the EBP were noticed by 15 patients and included: backache or "stiff back," five patients; neckache or "stiff neck," four patients; paresthesias in the legs or toes, five patients; crampy sensation or "fullness in the lower abdomen," one patient. A subcutaneous hematoma at the site of injection occurred in one patient.

No severe or permanent complication (sepsis, epidural abscess, epidural hematoma, neurologic deficit, or muscle weakness) was reported at the time of EBP or at one-year follow-up. To date, one transient neurologic complication has been attributed to EBP. The symptoms appeared to have been related to nerve-root irritation or pressure, and resolved completely within ten days.[4]

The consensus of the case reporters was that an epidural blood patch is an effective, safe treatment for refractory post-lumbar-puncture headache.

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Obstetric Anesthesia Organizations in the United States

To the Editor:—Awareness of the special problems associated with obstetric anesthesia led Sappenfield, in 1958, during his tenure as President of the American Society of Anesthesiologists (ASA), to establish a "Committee on Maternal Welfare." Chaired jointly by Bonica and Hingson in 1958, by W. A. Cull in 1959, and by O. C. Phillips from 1960 on, the committee directed its major efforts toward achieving closer cooperation and better communication between the ASA and the American College of Obstetricians and Gynecologists (ACOG). Phillips met with the ACOG Committee of Obstetric Anesthesia in 1960, and liaison between the two committees was established in 1963. In the same year, a manuscript on "Pain Relief in Labor and Childbirth" was prepared by the ASA Committee as a guide for a brochure for expectant mothers which was published and distributed by ACOG. Standards for obstetric analgesia–anesthesia and infant resuscitation were formulated in 1964 and included in the ACOG Manual of Standards. An obstetric anesthesia record was also devised and accepted by ACOG. At the request of both ASA and ACOG, recommendations regarding obstetric anesthesia training for anesthesiology residents as well as for obstetrics residents were outlined.

In 1966, Bonica, then President of ASA, appropriately changed the committee's name to "Committee on Obstetrical Anesthesia," as it had become evident that the anesthesiologist was concerned with fetal–neonatal welfare as much as with the well-being of the mother. Phillips remained chairman of the renamed committee through 1968, B. E. Smith took over from 1969 through 1972, and G. F. Marx from 1972 through 1974. Further accomplishments of the ASA Committee on Obstetrical Anes-

thesia included a survey on Residency Training in Obstetric Anesthesia,[1] a conference on Obstetric Anesthesia Coverage (Pittsburgh, 1966), with publication of the Conference Proceedings[2] and a film on "Obstetric Anesthesia" (1968). In cooperation with ACOG, several weekend lecture series dealing with safe obstetric anesthesia and infant resuscitation were held in midwestern and southern centers. An exhibition, "Infant Resuscitation and Endotracheal Intubation of the Neonate," was prepared by Smith and members of the ACOG Committee and presented at a number of national and international meetings from 1969 through 1972. In addition, members of the 1973 Committee wrote a chapter on the "obstetric suite" for the ASA Handbook on Procedures[3] and organized a Workshop on Obstetric Anesthesia, which was held in Dallas in February 1974.

The ASA Committee on Obstetrical Anesthesia also had a major role in the preparation of the ACOG Technical Bulletin entitled "Obstetrical Analgesia and Anesthesia."[4] The introductory sentences of the revised bulletin read: "Pain relief during labor and delivery is an important aspect of modern obstetrics. It consists of more than providing personal comfort to the mother; it is a necessary part of good obstetrical practice." The second paragraph is a quotation from the Accreditation Manual of Hospitals (Joint Commission on Accreditation of Hospitals, March 1971) and states that "Obstetric anesthesia must be considered as emergency anesthesia demanding a competence of personnel and availability of equipment similar to or greater than that required for elective procedures."

The ASA Committee on Obstetrical Anesthesia falls under the Section on Clinical Care. An additional committee, a Sub-Committee on Obstetric Anesthesia and Perinatology for the Annual Meeting, was initiated in 1973 and charged with the responsibility of making appropriate selections for the program. The chairman of the latter committee is a member of the former. Membership of the Committee on Obstetrical Anesthesia (Clinical Care) has ranged from a high of 12 to the present number of five; membership of the Committee on Obstetric Anesthesia and Perinatology (Annual Meeting) is also five.

With the roster of obstetric anesthesiologists steadily growing, the time was ripe for an informal society which would foster discussions of common problems with knowledgeable and interested obstetricians and pediatricians. Credit for getting such an organization off the ground must go to R. F. Hustead, Phillips, and Smith. The first meeting took place in Kansas City in the fall of 1969. More than 50 physicians with special interest in maternal and/or neonatal well-being attended and chose to name the new organization the "Society for Obstetric Anesthesia and Perinatology" (SOAP). The second annual meeting, held in Nashville in the spring of 1970, attracted nearly twice the original number of participants. The Society was formally organized at its third meeting (Atlanta, 1971). The Articles of Organization and By-Laws state that "The Society does not seek corporate status nor legal identity . . . The purpose of the organization is to provide a forum for discussion of problems unique to the peripartum period. This includes clinical practice of medicine, basic research, practical business and public health aspects of this important phase of life . . . This Society is dedicated to informality, but to effective facilitation of the unrestricted and spontaneous interchange of new ideas in this field. It further seeks to disseminate pertinent new information to other medical and lay groups and to stimulate improved practices in all aspects of this field . . . Any physician or scientist particularly interested in the problems of the perinatal period may become a member of the organization. Others may attend the annual meetings as guests . . . There shall be only one class of members: Active Membership . . . The Annual Meeting must be held on a weekend."

SOAP has continued to grow. Of 130 registrants at our sixth meeting (San Francisco, 1974), 77 were anesthesiologists, 22 pediatricians, 19 obstetricians, and 12 in other disciplines. From the onset, SOAP has published a quarterly Newsletter, edited by Shnider during the first four years and by G. W. Ostheimer since. More important, SOAP has initiated two reviews, one on "complications of fetal monitoring" and one on "timing of postpartum tubal ligation." SOAP

also has instituted a registry of "blood patch" treatment for postspinal headache, the results of which are published in this section.[5]

Annual meetings of SOAP have planned scientific sessions. Formal presentations on a specific topic are delivered by guest speakers. Reviews of "what is new in obstetric anesthesia," "what is new in obstetrics," and "what is new in neonatology" are given by members who are specialists in these fields. Presentations of "work-in-progress" are followed by discussions and constructive criticism. Next year's SOAP Meeting will be held in Philadelphia under the aegis of B. B. Gutsche. All interested physicians are welcome!

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Halothane MAC in the Rabbit

To the Editor:—The development of a reliable method for endotracheal intubation and halothane anesthesia in white New Zealand rabbits[1] has facilitated the use of these animals for major surgical and shock experiments in our laboratory. To monitor the rabbits a simple, reliable means for assessing anesthetic depth was needed. Therefore, we determined the minimum alveolar concentration (MAC)[2] of halothane in unpremedicated, spontaneously breathing rabbits under normothermic, normotensive conditions with blood gases maintained in the normal range. MAC was determined as the mean of the lowest alveolar concentration preventing and the highest permitting a response when the rabbit's tail was clamped with a bulldog arterial clamp. MAC was determined after an anesthetic equilibrium had been reached, assessed as inspired halothane concentration approximately 10 per cent higher than expired gas tension. Expired gas samples were obtained by aspirating serial (1 ml) samples at the end of each spontaneous expiration through an Intracath catheter located at the tip of the endotracheal tube. The mean halothane MAC for these rabbits was 0.82 ± 0.3 vol per cent. Arterial blood samples were simultaneously drawn with the end-tidal gas samples and also analyzed for halothane. The average arterial halothane value corresponding to MAC was 27.6 ± 8 mg/100 ml. Both arterial blood and end-tidal gas samples were analyzed for halothane by gas chromatography. Our studies are in agreement with findings of other investigators[3] who have shown that the anesthetic requirement for halothane cannot be accurately measured from inspired gas samples. The inspired-to-alveolar gradient in our rabbits showed the inspired halothane concentration to be approximately 10 per cent higher than the alveolar concentration.