

stantial number of the specific titles of the individual papers, and the contents of a representative sampling of these, have direct and responsible relevance to anesthesiology—i.e., fluid balance and exchange, circulatory shock, regional blood flow, oxygen transport, serum osmolality, blood viscosity, microvascular pharmacology and physiology, blood coagulation (DIC).

The book, according to the Editor, was photo-offset-printed, and the individual papers deliberately held to such short lengths to keep its cost reasonable for individual readers—a practical consideration often overlooked in published proceedings of such conferences. It is not a criticism, however, to say that the latter consideration has its own price, in that it limits the volume's usefulness as an advanced source of information on previously unpublished work, particularly for investigators in the field who have need for more detailed knowledge about any particular piece of

research presented at the Conference in the areas of their own special interests. Undoubtedly most of such detailed information will probably become available as a separate full-length journal publication (unrelated to the Conference) at a later date. Nevertheless, the Proceedings does offer an advance overview of current developments in the field of microcirculation, as well as the opportunity to identify, for follow up, the nature and sources of specific ongoing research in microcirculation. On this basis, the book can be recommended to individuals interested in keeping abreast of research in the field of microcirculation—researchers, clinicians, students.

S. G. HERSHEY, M.D.
Professor of Anesthesiology
Albert Einstein College of Medicine
Bronx, New York 10461

Literature Briefs

Peter J. Cohen, M.D., Editor

Literature Briefs were supplied by Drs. A. Boutros and P. J. Cohen. Briefs appearing elsewhere in this issue are part of this column.

Shock

GLUCOCORTICOID IN ENDOTOXIN SHOCK Twenty-four adult *Macaca fascicularis* monkeys weighing 2.3–4.5 kg were sedated with phencyclidine HCl and appropriate cannulations performed. One to two hours later, control arterial blood samples were obtained. Animals were divided into three groups. Group 1 received 10 mg/kg of endotoxic lipopolysaccharide (LPS) prepared from gram-negative aerobic organisms isolated from the monkey's own intestinal flora. Group 2 received 5 mg/kg dexamethasone sodium phosphate (DMP) intravenously, immediately followed by 10 mg/kg LPS. Group 3 received 10 mg/kg LPS followed by 5 mg/kg DMP 15, 30, 60 and 90 minutes later in four subgroups. Blood samples were obtained one, three, and six hours after injection and whenever mean aortic pressure fell to 30 mm Hg. The animals were left undisturbed until death or for six hours following injection of LPS. Survivors received 60 ml of salt solution intravenously and following decannulation,

were fed and observed for two to three weeks. Thirty per cent of Group 1, 88 per cent of Group 2, and 100 per cent of Group 3 survived past 36 hours and were considered recovered from shock. These figures were significant. In non-survivors in Group 1, preterminal serum glucose levels were significantly lower than control values in Group 1 and six hours' values in Groups 2 and 3. Serum lactate values in preterminal Group 1 were significantly higher than control in Group 1 and six-hour samples in Groups 2 and 3. Twenty more monkeys were similarly studied for effects of DMP on hepatic carbohydrate metabolism and hepatic nucleotide phosphate levels following injection of LPS, with the following conclusions: LPS significantly decreased hepatic levels of glucose-6-phosphate, fructose-6-phosphate, ADP, and glycogen. LPS also significantly increased hepatic levels of fructose 1-6-diphosphate, lactate, and AMP. Administration of DMP resulted in maintaining control values of the above-mentioned metabolites. (Schuler JJ, Erce PR, Schuler W: Glucocorticoid effect on hepatic carbohydrate metabolism in the endotoxin-shock monkey. *Ann Surg* 183: 345–354, 1976.)