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### Anesthesia

**BIDIRECTIONAL PLACENTAL TRANSFER** EEG electrodes were placed in the brains of fetal guinea pigs and their mothers. Administration of meperidine to the mother by the intravenous, intramuscular or intraperitoneal route produced EEG evidence of meperidine depression in both mother and fetus. These changes included the appearance of high-voltage slow waves and the presence of 15-to-25-second waveforms. Maternal intravenous administration produced rapid changes in the maternal and fetal EEG, the fetal changes appearing 69 seconds after maternal administration. Maternal intraperitoneal administration produced the slowest effect, 178 seconds being required for fetal changes to occur. In other preparations, meperidine was given intraperitoneally and intramuscularly to fetal guinea pigs. Maternal effects required 217 and 182 seconds, respectively. These studies demonstrate a bidirectional transfer of meperidine across the placenta. (*Rosen, M., and Bleyer, W.: Bidirectional Transfer of Meperidine Across the Guinea Pig Placenta, Amer. J. Obstet. Gynec.* 101: 918 (Aug.) 1968.)