

Summary

Comparison was made between the tolerance of the fetus and that of the newborn to intracerebral injection of a local anesthetic agent (mepivacaine). Doses which were without sequelae to the fetus were invariably lethal to the newborn. There was a direct correlation between the clinical condition of the newborn and the time between administration of the drug and delivery. Mepivacaine was rapidly transferred across the placenta to the mother and was present, although in lower concentrations, in control litter mates.

It is concluded that the rate of disappearance of mepivacaine resulting from degradation of the drug in the newborn does not compare favorably with the rate of elimination of the drug by the placenta. The inference is made that following inadvertent administration of a local anesthetic agent to the human fetus it is advantageous to defer delivery and to rely on the placenta for drug clearance and exchange of respiratory gases.

References

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Surgery

HEARING LOSS The effect of increased ambient air pressure on hearing function in 26 experienced divers was investigated. Audiograms were done at 1, 4, 7, 10 and 11 atm. An elevation of threshold of hearing was demonstrated from air conducted sound which increases with increased ambient air pressure. Bone conduction remains normal. (Fluur, E., and Adolfsen, J.: *Hearing in Hyperbaric Air, Aerospace Med.* 37: 783 (Aug.) 1966.)

ABSTRACTOR'S NOTE: This fact should be borne in mind during communication in a hyperbaric chamber.