

it is partially withdrawn, its direction changed by inclining its shaft a little inward and downward, and re-introduced until its point again comes in contact with the bone. The upper wall of the obturator canal is then felt and the needle is passed beneath it and advanced 2 cm. further, keeping close contact with the upper wall of the canal and following its direction outward, backward, and upward. An injection is then made of 10 cc. of a 1 per cent solution of procaine hydrochloride containing adrenalin hydrochloride 1:100,000 while the needle is slightly moved to distribute the solution along the obturator canal. . . .

A skin wheal is now raised at the apex of Scarpa's triangle. Intradermal and subcutaneous injections are now made from this wheal along the sartorius and adductor longus muscles up to Poupart's ligament and along the ligament. These injections require about 60 cc. of the 0.5 per cent solution of procaine hydrochloride containing adrenalin hydrochloride 1:100,000. 3 references.

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SNYDER, F. F., AND KIAH TI LIM: *Effect of Morphine on Labor*. Proc. Soc. Exper. Biol. & Med. **48**: 199 (Oct.) 1941.

The question has arisen many times as to the mechanism whereby the administration of morphine to the mother in labor may result in injury of the fetus. There must be considered first the effect of the drug upon the fetus directly; and second, the effect of the drug on the labor mechanism. The present experiments were undertaken to determine whether or not the effect of morphine upon the fetus is of greater consequence than the effect of the narcotic upon the course of labor.

Rabbits were studied. Morphine in dosage of 13 mg. per kilogram was given intravenously to the maternal

animal at the onset of labor. This dose resulted in well marked analgesia of the mother without loss of consciousness. In 8 litters containing 45 fetuses, all of the fetuses except one were born alive and survived when delivery was carried out by hysterotomy, at intervals varying from twelve minutes to fifteen hours after injection. In litters delivered at twelve and twenty minutes after injection, fetal narcosis was marked.

In 13 animals the same dose was given at the same time, and the mothers allowed to deliver spontaneously. Here, in striking contrast to delivery by hysterotomy, the incidence of stillbirths amounted to 70 per cent of the litters. Prolongation of labor was noted and gave evidence of impairment of the expulsion mechanism.

It would seem that the chief damage of morphine is on the labor mechanism rather than directly on the fetus. In so far as the experiments reveal the etiology of respiratory failure at birth following the administration of morphine during labor, it is evident that injury of the fetus is largely a consequence of injury of the birth mechanism rather than of fetal narcosis.

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OWENS, L. B.; WRIGHT, JACKSON, AND BROWN, EDNA: *The Efficacy of Intravenous Sodium Bicarbonate Therapy in the Treatment of Diabetic Ketosis*. Arch. Int. Med. **68**: 1066 (Dec.) 1941.

The intravenous administration of sodium bicarbonate in diabetic ketosis was first used in 1886, but there is still disagreement as to its efficacy. Evaluation of a single procedure is difficult because there are so many different prognostic and therapeutic factors.

Disturbed carbohydrate metabolism results in excessive fat metabolism and excessive formation of intermediary break-down products, ketones. These