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Transference of para-amino-hippurate from the mother to the amniotic fluid

O. Althabe, G. Sabini, A. Basso, A. Fernández, D. Torrado, R. Belitzky, R. Caldeyro-Barcia

Latin American Center for Perinatology and Human Development (PAHO/WHO),
Department of Physiopathology, Medical Faculty, Montevideo, Uruguay

To our knowledge there are few studies which analyze the time course of the concentration in amniotic fluid of alien substances administered to women during pregnancy. This is particularly true for those substances mainly cleared by the kidney into the urine.

HANON et al. [7] gave orally para-amino-hippurate (PAH) to mothers during labor and found that about two hours later, the concentration of PAH in amniotic fluid was higher than that of maternal plasma. BRANDES et al. [4] showed that inulin passed from the mother to the fetus during late pregnancy but ROSA [9] administering this substance to the mother, could not find it in serial samples of amniotic fluid.

Recently BASSO et al. [2] demonstrated that mannitol administered to the mother appears in amniotic fluid at increasing concentrations reaching values higher than those found in simultaneous samples of maternal plasma.

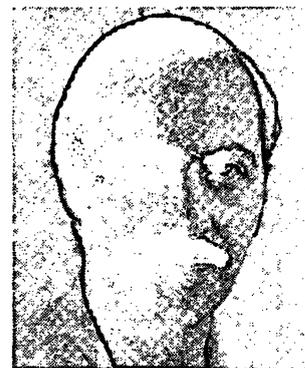
This type of studies may contribute to the knowledge of fetal renal function and its role in the formation of amniotic fluid, as well as the transference of substances through the mother-fetus-amniotic fluid complex.

1 Material and methods

Thirteen pregnant women were studied. In two of them fetuses had died at 36 weeks of gestation between 36 and 72 hours before the study was

Curriculum vitae

OMAR ALTHABE studied in Buenos Aires and graduated from the National University in 1955. During 1963–1965 he was a research fellow at the *Servicio de Fisiología Obstétrica* in Montevideo, Uruguay. Since then his work is dedicated to clinical research in Perinatology. In 1970 he was appointed as Medical Officer, Perinatologist, of the Pan American Health Organization (PAHO/WHO) at the Latin American Center of Perinatology and Human Development, Montevideo, Uruguay where he is still working.



performed. In the remaining 11 subjects with live fetuses, amniotic fluid studies were performed to determine gestational age which was unknown. The results of these studies as well as the examination of the neonate indicated that the pregnancies were at term.

In all cases, transabdominal amniocentesis was performed and a catheter was placed into the amniotic cavity. Also, a maternal vein of the arm was catheterized.

The 13 pregnant women received a single i/v injection of PAH at a rate of 8 mg/Kg, followed by an intravenous infusion of the same substance. In 11 mothers the infusion rate was 380 mcg/min/Kg