

# ULTRASOUND AND HORMONOLOGY IN THE DIAGNOSIS OF HYDATIFORM MOLE WITH COEXISTENT FOETUS

## A case report

M. GERLI, A. ANGELINI, S. CORSO,  
R. FERRARESE, A. MARIUCCI, G. GILARDI

Obstetric and Gynecological Department  
University of Perugia (Italy)

The incidence of hydatiform mole with coexistent foetus is reported as being 1/10,000 and 1/100,000 pregnancies (<sup>1</sup>).

The diagnosis of this abnormality was, until recently, based on high urinary levels of HCG, and the heartbeat of the foetus by Doppler ultrasound; when this was absent diagnosis could not be made until the foetus was expelled from the uterine cavity.

Today, however, greater diagnostic accuracy can be obtained with combined echography and hormone assay than was previously possible with Doppler ultrasound, urinary HCG evaluation or other techniques, such as amniography, alone (<sup>2</sup>).

We report a case of hydatiform mole coexistent with a 12 week old foetus.

A 40 year old woman at the 12th week of her second pregnancy was seen at the Institute of Gynaecology and Obstetrics, Perugia University, for abdominal pain and genital bleeding. At abdominal vaginal exploration the volume of the uterus was two weeks greater than the gestational date and the neck of the uterus was conserved and closed; there was also modest bleeding from the cervical canal.

Real-time ultrasound examination of the uterine content revealed a foetus with cardiac and motor activity consistent with the 12th week of gestational age.

The placenta was normoreflectant and the acoustic density homogenous. The mass was greater than normal and there were transonic areas in the content, the largest of which measured 0.7 cm.

Owing to the last finding a diagnosis of suspected initial hydatiform degeneration was made.

Urinary HCG assay showed the levels to be higher than normal range and later routine assays revealed a progressive increase in hormone levels. This finding, also, favoured a diagnosis of hydatiform mole.

A second ultrasound investigation confirmed the molar degeneration of the pla-

## SUMMARY

The Authors report a case of hydatiform mole coexistent with a 12 week old foetus. They suggest that a diagnosis of hydatiform mole cannot always be based on the results of ultrasound examination and that combined ultrasound/hormone assay investigation is a valid obstetric tool for formulating the diagnosis and prognosis of hydatiform mole.

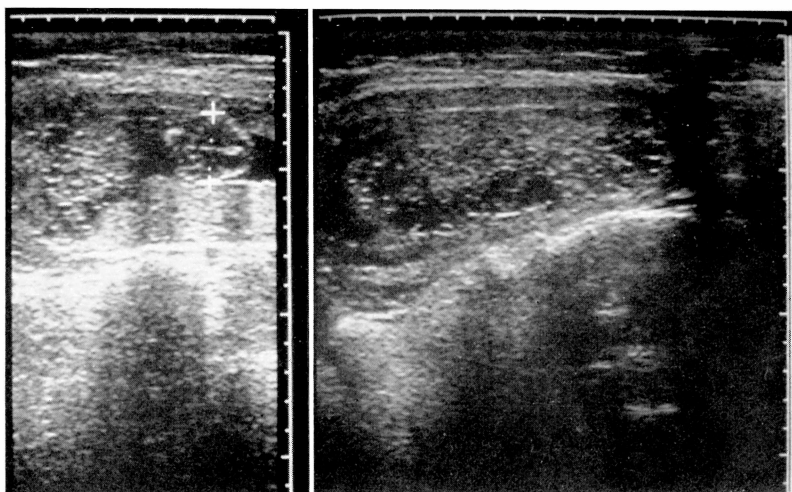


Fig. 1.

Fig. 2.

Fig. 1. — Transverse scan of the pregnant uterus at the level of the fetal head (BPD 2.5 cm); the scan shows also the placenta with a homogeneous area and an area with multiple cysts.  
Fig. 2. — The longitudinal scan shows the enlarged uterus filled with multiple cysts (typical molar appearance).

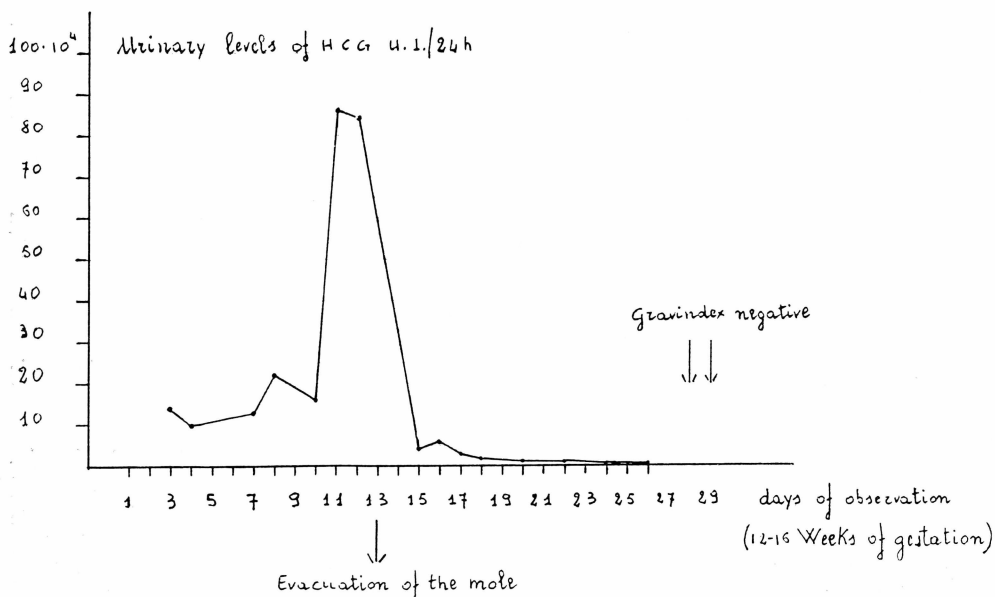


Fig. 3. — Urinary levels of HCG (U.I./24 h).

centa and the presence of a foetus with heartbeat.

The results of the combined ultrasound hormone assay monitoring are illustrated in figs. 1, 2, 3.

#### DISCUSSION

The diagnosis of hydatiform mole with coexistent foetus may present a considerable difficulty. The present investigation suggests that a diagnosis of hydatiform mole cannot always be made on the results of ultrasound examination; at least not until such time as the structural arrangement of the chorial villi leads to the characteristic snow storm image. It also demonstrates the diagnostic value of high HCG levels.

In the present case, repeated ultrasound examination confirmed the diagnosis

of hydatiform mole with foetus indicated by the hormonal levels and allowed us to evacuate completely the molar tissue and foetus from the uterus.

We contend that the diffusion of ultrasound in obstetrics should not obscure the high diagnostic value of HCG assay, which is of particular importance in those cases where modification in hormone levels precede the anatomical alterations, moreover combined ultrasound/hormone assay investigation is a valid obstetric tool for formulating the diagnosis and prognosis of hydatiform mole.

#### BIBLIOGRAPHY

- 1) Jones W.B., Lanrsen N.L.: *Am. J. Obst. Gyn.*, 122, 267, 1975.
- 2) Rubino S.M.: *Obst. Gyn.*, 46, 364, 1975.