

## Case Report

# Ultrasound Diagnosis of a Twin Pregnancy Combining A Molar Pregnancy and A Normal Singleton Pregnancy About A Case in Bouake

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## Abstract:

Twin pregnancy combining a complete mole and a normal singleton pregnancy with its own healthy trophoblast is a rare entity. The most formidable complication is the progression towards gestational trophoblastic disease. We report the case of a 29-year-old patient, primigravida, consulting for metrorrhagia with amenorrhea of approximately 12 weeks. The pelvic ultrasound performed revealed the association of a complete hydatidiform mole and a normal singleton pregnancy.

A medical termination of the pregnancy was decided with first expulsion of a fetus with its trophoblast followed by expulsion of multiple vesicles of different sizes.

The evolution is marked by the decline of plasma BHCG until negativation after 10 weeks.

**Keywords: Twin pregnancy, molar pregnancy, singleton pregnancy, ultrasound.**

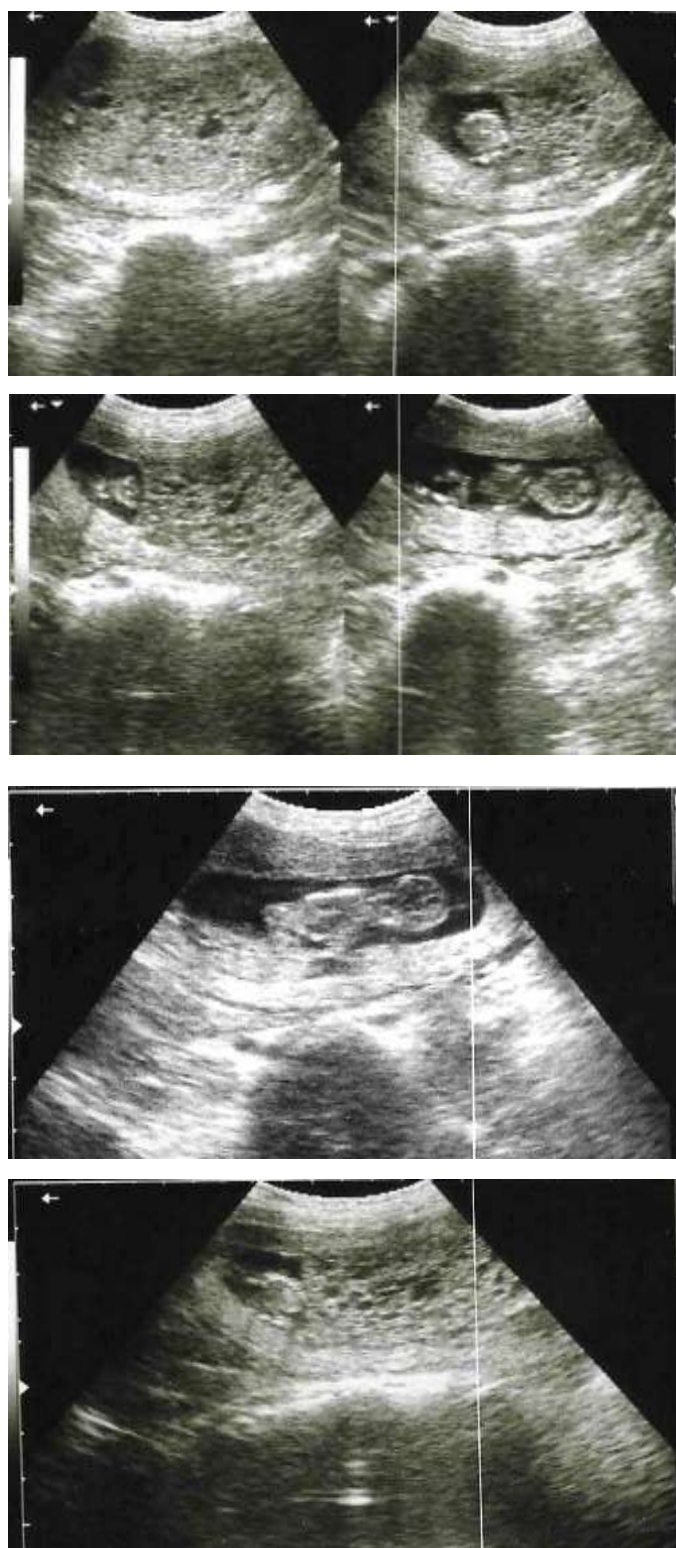
## Introduction

The first trimester ultrasound makes it possible to confirm the pregnancy, locate the embryo, do the dating as well as the number of embryos. This ultrasound is often performed to explore metrorrhagia. In this case, we report a twin pregnancy combining a molar pregnancy and a normal singleton pregnancy complicated by metrorrhagia revealed on first trimester ultrasound. This association is a rare entity, with an estimated incidence of 1 case per 20,000 to 100,000 pregnancies [1-3]. The continuation of the pregnancy is controversial given the risks of immediate and distant maternal complications, notably prenatal hemorrhage which is the most common complication requiring termination of the pregnancy [9]. However, when the diagnosis is made late in the third trimester, the pregnancy is most often left until term. Indeed, the majority of studies show that the prognosis of such an

association includes a slightly increased risk of progression towards a gestational trophoblastic tumor [6,7].

## Observation

We report the case of a 29-year-old primigravida patient admitted to a first trimester case of metrorrhagia. The pelvic ultrasound carried out reveals a living fetus of 12 weeks with a normally inserted homogeneous placenta associated with a heterogeneous mass made of numerous vesicles of different sizes giving the honeycomb appearance and measuring 58 mm x 35 mm suggesting a complete hydatidiform mole (figure 1).



**Figure 1: ultrasound appearance showing a living fetus of 12 weeks and its homogeneous normally inserted placenta, with an associated mass suggesting a complete hydatidiform mole**

The biological assessment revealed microcytic hypochromic anemia (6.4dl), a B+ blood group and a plasma BHCG of 171,200 U/L. She received a blood transfusion from two 500ml bags of packed red blood cells.

A medical termination of the pregnancy was decided with first expulsion of a 12 week fetus with its trophoblast followed by expulsion of multiple vesicles of different sizes (Figure 2).

The examination of the placenta was without abnormality and

the histological study of the heterogeneous mass concluded with the diagnosis of a complete hydatidiform mole associated with a normal fetus.

The evolution was marked by the progressive decline of the plasma BHCG level until negativation after 10 weeks.

### Discussion:

The twin mole with coexistence of a living embryo and a molar pregnancy is an extremely rare event. [2].

This association can be classified into three main types [4,5]:

- A twin pregnancy in which one twin is diploid with a normal placenta and the other twin is a complete hydatidiform mole like the case of our patient.
- A twin pregnancy with a singleton triploid fetus with a partial hydatidiform mole placenta.
- A twin pregnancy in which one fetus is diploid with a normal placenta and the other is triploid with a partial hydatidiform mole placenta.

This form of pregnancy is more often revealed early on ultrasound following metrorrhagia in the first trimester, which is the most common immediate complication.

In the case of our observation, it was a case of heavy metrorrhagia which required ultrasound to be carried out. The management of these forms of pregnancy is difficult, due to associated maternal and fetal complications such as [6-8]:

- Metrorrhagia,
- The risk of occurrence of early severe pre-eclampsia,
- Intrauterine growth retardation,
- Premature birth,
- Premature rupture of membranes,
- A placenta previa,
- Fetal death,
- Thyrotoxicosis,
- A risk of progression to a gestational trophoblastic tumor

Although prenatal hemorrhage is the most common complication requiring termination of pregnancy as the sole indication in the case of our observation, evolution towards a gestational trophoblastic tumor remains the most feared complication [9]. Lin et al [11] reported in their study a progression towards gestational trophoblastic disease which seemed significantly linked to a very high initial plasma BHCG level and associated complications requiring termination of the pregnancy.

In current practice, the recommendations for the management of twin pregnancies combining a large molar and a normal singleton pregnancy are not yet codified. However, some authors suggest that the pregnancy can be carried to term if the diagnosis is made late and in the absence of complications [14]. But if the diagnosis is made late with the notion of fetal malformation or karyotype abnormality on amniocentesis then termination of the pregnancy would seem appropriate. Some authors suggest that the pregnancy can be carried to term if the diagnosis is made late and in the absence of complications [14] and that the probability of obtaining a live birth varies between 16 and 60% [11, 15].

In this case, it is imperative to note that in the follow-up, pelvic ultrasounds must be repeated in order to follow the evolution of

the molar placenta and to suggest possible myometrial invasion using color Doppler [12].

While knowing that the probability of obtaining a live birth varies between 16 and 56% [15].

Despite these cases raised, cases where the diagnosis of twin pregnancy associating a large molar and a normal singleton pregnancy was made at an early age, termination of the pregnancy is very often required [16].

Indeed, according to literature data, the incidence of this form of association between a complete hydatidiform mole with a normal singleton pregnancy is higher and varies from 46 to 57% [3,6,10, 11]. As in the study by Rohilla et al [9] where approximately 177 cases of twin pregnancy combining a complete mole and a normal singleton pregnancy were described in the literature until 2015 with only 66 live births. These observations made by the authors corroborated with our clinical case. On the other hand, Sebire et al [2] noted a similar rate between single hydatidiform moles and hydatidiform moles associated with a twin pregnancy.

As said above, in our case, we opted for termination of the pregnancy due to the existing immediate complications such as heavy and repeated metrorrhagia and the anemic syndrome. Without forgetting, however, the possible progressive complications such as preeclampsia, hyperthyroidism, death of the healthy fetus and the risk of progression towards gestational trophoblastic diseases which could have occurred if we had agreed to keep the pregnancy.

## Conclusion

Twin pregnancy combining a complete mole and a normal singleton pregnancy is often associated with complications requiring termination of the pregnancy. The most feared complication is the progression to gestational trophoblastic disease. Close monitoring of the decline in plasma BHCG is recommended.


## Declaration of Interest

The authors declare that they have no conflict of interest.

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