

TWO CASES OF TWIN GESTATION WITH CO-EXISTING COMPLETE MOLE

G Sharma (Senior Clinical Fellow), R Black (Consultant Obstetrician and Subspecialist in Fetomaternal Medicine),
Department of Obstetrics & Gynaecology, John Radcliffe Hospital, Oxford University Hospitals NHS Foundation Trust

INTRODUCTION

Twin pregnancies with a Complete Hydatiform Mole and coexisting normal fetus are extremely rare with an estimated incidence of 1 in 20,000-100,000 pregnancies^{1,2} They are associated with both maternal and fetal complications. Less than 50% of cases result in a live birth and a significant proportion require early termination due to the development of severe pre-eclampsia. We present two cases of twin pregnancy with complete mole with different courses and outcomes.

CASE 1.

A 32 year old G2P1 ,previous caesarean, known to have sickle cell trait Referred to Fetal Medicine Department after her anomaly scan, which revealed a singleton normal pregnancy with a multicystic placenta. First trimester screening - low risk for trisomies; except, her hCG levels were raised at 6.8 MoMs. The Fetal Medicine Department scan - CHM with coexisting normal twin as the most probable diagnosis. She declined both offered invasive testing as well as termination and opted to continue the pregnancy.

ANTENATAL COURSE

- 25 weeks - she developed symptomatic hyperthyroidism, with palpitations, pulsatile tinnitus and tachycardia, and commenced on Propylthiouracil and Propranolol.
- 26 weeks- admitted for surveillance with mildly raised blood pressure (BP) and worsening anaemia.. bHCG levels were 127,334 IU at this point. She received an intravenous iron infusion.
An ultrasound scan at this time showed more than 50% uterine cavity was occupied by molar placental tissue.
- During the stay, she became increasingly tachypnoeic and tachycardiac.
Her raised BP necessitated treatment with antihypertensives. Urine protein level remained normal.
Her haemoglobin level dropped further (71 mg/dl) requiring blood transfusion and she remained thyrotoxic despite treatment.

Decision to offer elective delivery by caesarean section at 28 weeks : considering the possibility of bleeding into the molar tissue in view of the gradual deterioration in her clinical picture. However, she suffered an ante-partum haemorrhage on the day prior to her planned delivery date.

EMERGENCY CAESAREAN SECTION was performed

Female baby weighing 895 g was born in good condition and admitted to SCBU

Per-operative findings suggested concealed blood within the molar pregnancy. The baby was delivered first and then the placenta by controlled cord traction. The molar tissue was removed by suction.

Uterine massage was performed to encourage uterine contraction; however, intra-myometrial carboprost was subsequently given as tone remained poor. The **total blood loss** was estimated to be 5 litres (one litre preoperatively and significant proportion thought to be concealed in the molar tissue prior to delivery of the baby).

She received a total of 5 units of blood.

POSTOPERATIVE COURSE

She otherwise recovered well and was discharged on Day 6.

Histopathology confirmed the diagnosis.

Her bHCG levels were raised to 334,674 IU on the day of delivery and dropped to 4434 after a week.

BABY

The baby was admitted to ITU and required assisted ventilation for two days. She was transferred to the District General Hospital on day 7 on high flow Oxygen.

CASE 2

A 26 year old, G3P2+3

EPAU She was scanned at 6, 8 and 11 weeks of gestation at the Early Pregnancy Unit due to bleeding - diagnosed as a dichorionic diamniotic twin pregnancy with a miscarriage of one twin at 8 weeks’. A fetal pole was never seen.

She reported hyperemesis that was worse than her previous two pregnancies.

FMU Referred to the Fetal Medicine Department in view of high bHCG levels (16.9 MOM) on combined screening

The Fetal Medicine Ultrasound showed one normally grown fetus with normal anatomy and a normal looking posterior placenta, along with another cystic placenta. Given the history, raised HCG and placental appearances the most likely diagnosis was a dichorionic twin pregnancy with one normal fetus and another complete mole.

The parents were counselled and opted not to continue with the pregnancy.

SURGICAL TERMINATION was performed uneventfully.

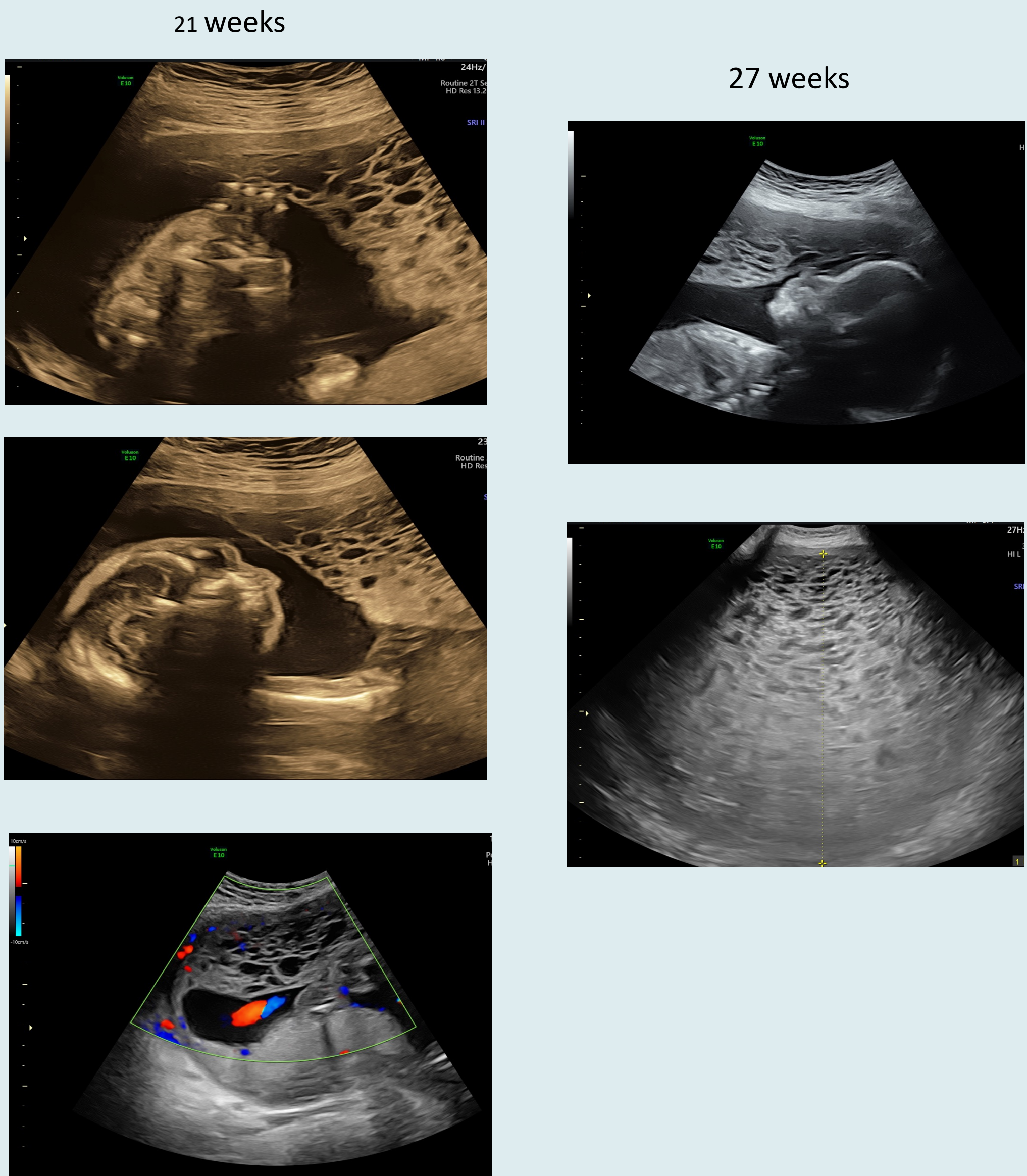
The uterus was evacuated with use of suction and tissue forceps under the continuous ultrasound guidance.

Misoprostol was used for cervical priming after taking into consideration the risk of perforation and haemorrhage versus the small risk of embolization.

The **total blood loss** was estimated to be 500ml and patient was discharged the same day.

The histopathology confirmed the diagnosis.

ULTRASOUND IMAGES



FOLLOW UP

Both the patients were referred to the Gestational Trophoblastic Disease (GTD) Centre for follow up; both are currently well.

DISCUSSION

Twin pregnancies with Complete Hydatiform Mole and coexisting normal fetus are a rare obstetric occurrence. Multiple pregnancies containing hydatidiform mole are usually detected by ultrasound during late first trimester or second trimester. The typical appearance dof ‘Swiss-cheese pattern’ placenta seen separately from a normal-appearing placenta and fetus is strongly suggestive of the diagnosis⁴.

The coexistence of a molar pregnancy an a live normal fetus carries a risk of multiple complications.

The most common maternal risks include severe haemorrhage (antepartum as well as postpartum) leading to anaemia, severe and early-onset preeclampsia, hyperthyroidism, thromboembolic disease and Gestational Trophoblastic Neoplasia²⁻⁴.

Fetal complications including miscarriage, premature birth, growth restriction and intrauterine death are common²⁻⁴. Once the diagnosis is established, the patient should be thoroughly counselled regarding the condition, the risks and the options of termination as well as expectant management and surveillance.

Genetic testing for the analysis of fetal karyotype is recommended especially before deciding on expectant management¹⁰.

Referral to a hospital with level three neonatal intensive care unit (NICU) facilities is recommended if the parents wish to continue the pregnancy.

Management requires a multidisciplinary approach with input from maternal and fetal medicine subspecialists, along with obstetric, midwifery, neonatal, haematological and anaesthetic and teams.⁸.

If expectant management is chosen, it is reassuring that several studies have shown similar risk of GTN with the continuation of pregnancy compared to a first trimester termination in case of twin pregnancies with co-existent mole^{2,6} and this is the advice provided by the RCOG green top guidelines¹⁰. However, there is some evidence of more frequent occurrence of GTN after a twin pregnancy with CHM compared to a singleton pregnancy^{5,9} On the other hand, other authors found no significant difference in the incidence of GTN after a singleton complete molar pregnancy vs multiple molar pregnancy^{6,7} The high bHCG levels, vaginal bleeding and severe preeclampsia are substantial risk factors for subsequent GTN⁹

CONCLUSION

Twin pregnancies with a coexistent molar pregnancy are extremely high risk and require careful surveillance at tertiary centre with multidisciplinary input. Parents should be adequately counselled, and normal karyotype of the live fetus should be ascertained before the continuation of pregnancy. It is not unreasonable to offer termination in early pregnancy. Close follow up for early detection of GTN is important.

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