www.jmscr.igmpublication.org
Impact Factor (SJIF): 6.379
Index Copernicus Value: 71.58
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v6i2.73

IGM Publication
Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publication

A Normal Live Intrauterine Fetus and Coexistent of Complete Hydatidiform Mole- A Rare Case

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Abstract
Our aimed to describe prenatal diagnosis and the outcome of complete hydatidiform mole and coexistent normal fetus.
A pregnant woman of 16 week 3 days GA has a vesicular mass along anterior uterine wall and normal fetus at ultrasound. On ultrasound patient have hematoma at lower uterine segment covering internal os and sub amniotic haemorrhage is also seen. Our diagnosis is twin pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole, hematoma at lower uterine segment and sub-amniotic haemorrhage.
Fetus weighing 300 g was delivered by induction at 17gestational weeks, because patient having completed their family and risk of persistent trophoblastic disease. The findings on USG is confirmed after delivery.
Keywords: *MPD (mesenchymal placental dysplasia), SCH (sub chorionic hemorrhage).*

Introduction

Twin pregnancy with an apparently normal fetus and a hydatidiform mole are uncommon, with an estimated incidence of 1 in 20,000 to 100,000 pregnancies(1). This pregnancy is high risk of spontaneous abortion, preterm delivery, intrauterine fetal death, bleeding, preeclampsia, persistent trophoblastic disease (PTD).It is usually diagnosed in the second trimester of pregnancy when the molar placenta is well-documented by ultrasonography examination(3-4). Jauniaux and Nicolaides(5) also described molar anomalies in twin pregnancy at the end of the first trimester. However, evidence on the USG appearance of complete H mole with normal live fetus in the first trimester is rare. Considering that the role of beta human chorionic gonadotropin (βhCG) is weakened in the diagnosis of gestational trophoblastic disease during pregnancy, identifying distinctive USG features of complete H mole with normal live fetus in the first trimester would be necessary to improve on an earlier prenatal diagnosis.

Case Report

The female patient, a 24-years old gravida-3, para-2, live-2 with 5-month amenorrhoea was referred to our radiology department at Ummaid hospital jodhpur for antenatal ultrasound examination. The patient has history of vaginal bleeding.
General physical examination- Blood pressure is 110/68 mm Hg. No pedal edema, no h/o DM, HTN, TB, Asthma.

βhCG, T3 and T4 hormones are significantly elevated.

On ultrasound examination-

A single live normal intrauterine pregnancy of 16 weeks 3 days. Presentation is unstable. Cardiac pulsation is present. Fetal movement is present. The liquor amount is adequate. No fetal anomalies are detected. The placenta is fundal-posterior grade-0.

There is multicystic mass (vesicular mass) seen along anterior uterine wall. Doppler shows no vascularity in the mass. The umbilical cord is seen to be inserting normally to a normal appearing fundal-posterior placenta.

There is a well-defined hypoechoic lesion, measuring~4.3x1.8 cm seen in the lower uterine segment, posterior to the vesicular mass covering internal os.

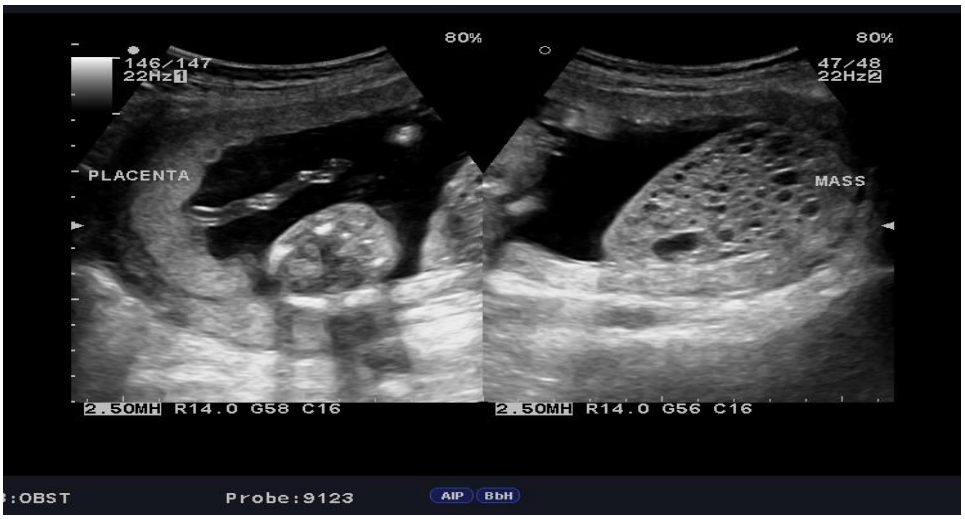
There is sub-amniotic haemorrhage seen anteriorly with ~12 mm maximum thickness.

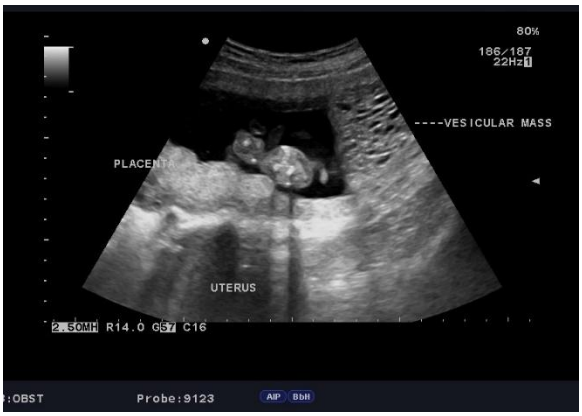
Impression-

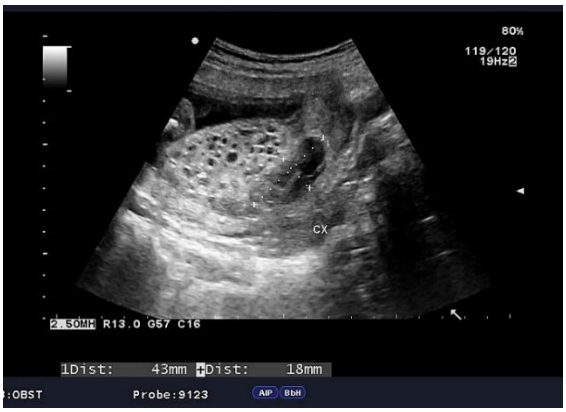
Twin pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole, hematoma at lower uterine segment and sub-amniotic haemorrhage.

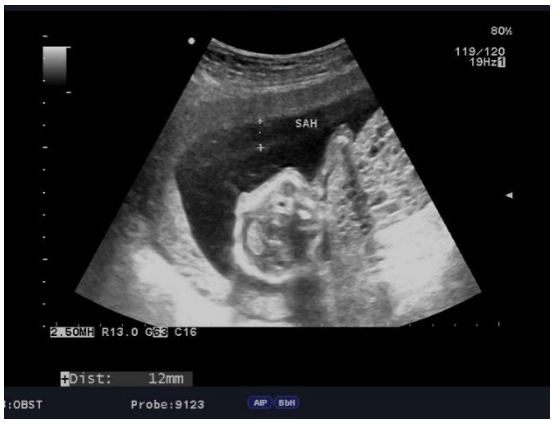
D/D is single live normal intrauterine pregnancy with molar changes in accessory lobe of placenta (succenturiate lobe).

Our first impression is confirmed after delivery.





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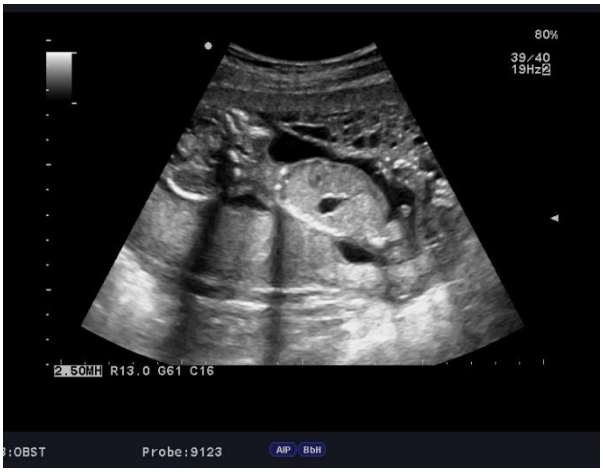
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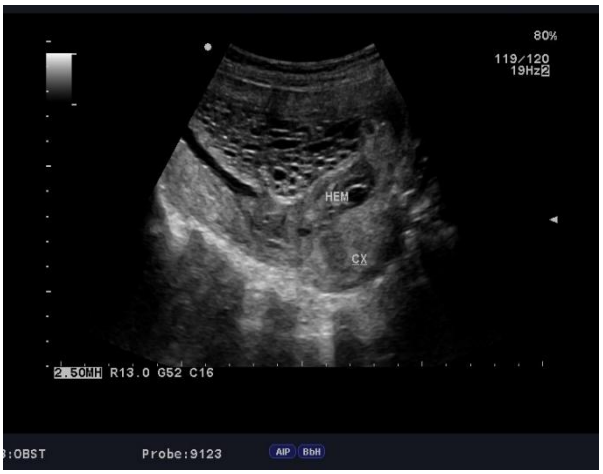
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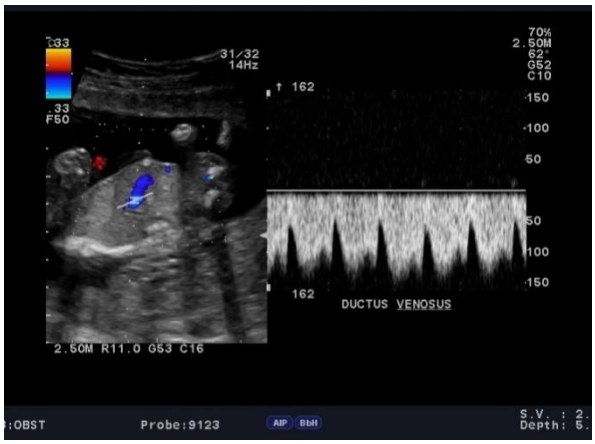
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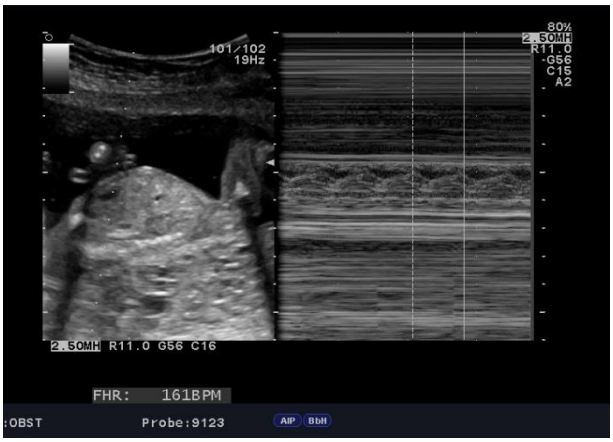
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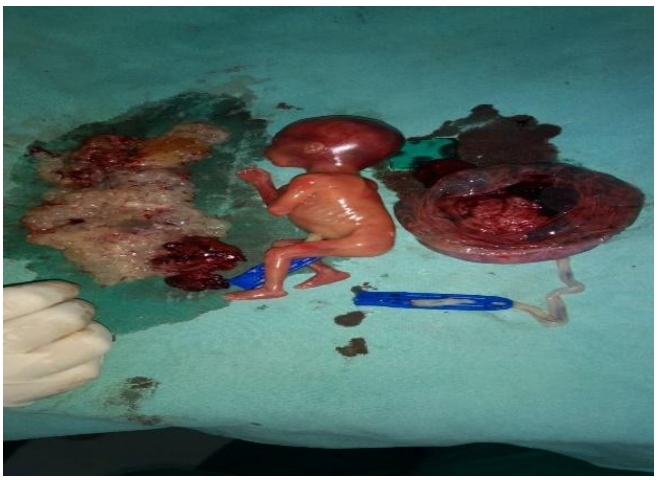
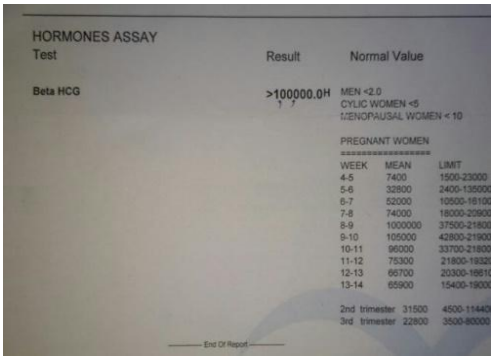


Other investigations

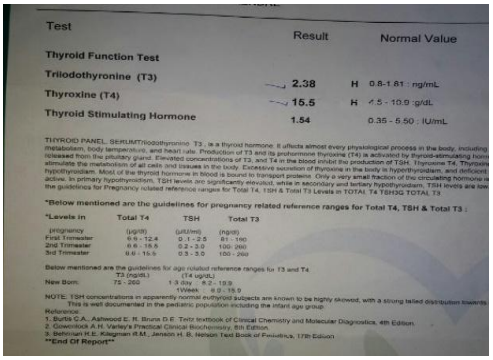

HORMONES ASSAY

Test	Result	Normal Value
Beta HCG	>100000.0H	MEN <2.0 CYLIC WOMEN <5 MENOPAUSAL WOMEN < 10

PREGNANT WOMEN

WEEK	MEAN	LIMIT
4-5	7400	1500-23000
5-6	32800	2400-135000
6-7	52000	10500-181000
7-8	74000	18000-209000
8-9	1000000	37500-218000
9-10	105000	42800-219000
10-11	96000	33700-218000
11-12	75300	21800-183000
12-13	66700	20300-198000
13-14	65900	15400-190000
2nd trimester	31500	4500-114400
3rd trimester	22800	3500-80000

End Of Report


Test	Result	Normal Value
Thyroid Function Test		
Triiodothyronine (T3)	2.38	H 0.8-1.81 : ng/mL
Thyroxine (T4)	15.5	H 4.5 - 10.9 :g/dL
Thyroid Stimulating Hormone	1.54	0.35 - 5.50 : IU/mL

THYROID PANEL, SERUMTriiodothyronine T3 , is a thyroid hormone. It affects almost every physiological process in the body, including metabolism, body temperature, and heart rate. Production of T3 and its prohormone thyroxine (T4) is activated by thyroid-stimulating hormone released from the pituitary gland. Elevated concentrations of T3, and T4 in the blood inhibit the production of TSH. Thyroxine T4, Thyroxine stimulates the metabolism of all cells and tissues in the body. Excessive secretion of thyroxine in the body is hyperthyroidism, and deficiency is hypothyroidism. Most of the thyroid hormone in blood is bound to transport proteins. Only a very small fraction of the circulating hormone is active. In primary hypothyroidism, TSH levels are significantly elevated, while in secondary and tertiary hypothyroidism, TSH levels are low. the guidelines for Pregnancy related reference ranges for Total T4, t SH & Total T3 Levels in TOTAL T4 TSHSG TOTAL T3

*Below mentioned are the guidelines for pregnancy related reference ranges for Total T4, TSH & Total T3 :

*Levels in pregnancy	Total T4 (µg/dl)	TSH (µIU/ml)	Total T3 (ng/dl)
First Trimester	9.9 - 12.4	0.1 - 2.5	81 - 190
2nd Trimester	8.6 - 15.5	0.2 - 3.0	100 - 260
3rd Trimester	8.6 - 15.5	0.3 - 3.0	100 - 260

Below mentioned are the guidelines for age related reference ranges for T3 and T4

	T3 (ng/dL)	(T4 µg/dL)
New Born:	75 - 260	1-3 day : 8.2 - 19.9 1Week : 7.5 - 15.9

NOTE: TSH concentrations in apparently normal euthyroid subjects are known to be highly skewed, with a strong tailed distribution towards This is well documented in the pediatric population including the infant age group.

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End Of Report

Discussion

The occurrence of a twin pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole is extremely rare[2,6]. There are previous cases reported, but natural history is poorly defined till now. The exact management of these cases are challenging. Early diagnosis is important because of the risk of maternal and fetal complications. However, there are many cases diagnosed retrospectively after birth or abortions. When a foam-like mass with normal fetus is seen on an ultrasound, radiologistmay suspect a twin pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole. To reach an accurate diagnosis, other conditions such as a single pregnancy having a partial hydatidiform mole with a fetus, MPD and SCH should be excluded. Classification of the condition with only an ultrasound examination is challenging. In a twin pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole, a ‘‘snow-storm’’ appearance typically occurs in addition to the normal placenta due to a complex, echogenic, intrauterine mass containing small cystic space on the ultrasound [8].

For a single pregnancy in partial mole, a normal placenta is not visible, and only a snowstorm-like placental mass is visible.

Mesenchymal placental dysplasia is a rare placental vascular anomaly. In this there is large placenta with grape like vesicles seen. Incidence of MPD is 0.02% of all normal pregnancy.

The most important factor in the differential diagnosis is the location of the abnormal mass. A molar mass is located outside the fetal sac, and an MPD mass is within the fetal sac.

Magnetic resonance imaging (MRI) could help to identify the location of an abnormal mass based in a fetal sac [7].

In the large SCH, both of hematoma and normal placenta are visible. The appearance of a hematoma is almost similar to that of a molar pregnancy mass.

The ultrasound findings of the normal fetus coexistent H mole presented. In women who have suspicious findings on ultrasound with vaginal spotting, early onset pre-eclampsia, severe morning sickness, or abnormal thyroid functioning, the radiologist could suspect a twin pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole. However, those symptoms are not specific. A confirmation of their chromosomes via chorionic villus sampling of abnormal foam-like tissue might facilitate reaching a differential diagnosis, the sampling procedure carries a risk of haemorrhage. Serial follow-up of the maternal serum βhCG levels might be of assistance in diagnosis during pregnancy.

When a twin pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole is diagnosed during pregnancy, detailed counselling with the patient regarding further treatment is needed because complications might arise, including pre-eclampsia, fetal demise, thyrotoxicosis, haemorrhage, trophoblastic embolism, and persistent trophoblastic disease [10].

According to previous reports, the fetal survival rate is50 %, and 33 % of the women progress to a

persistent gestational trophoblastic state after delivery[7]. Preterm deliveries might frequently arise because of vaginal bleeding, preterm labor, and fetal distress, as in the present case[11,12].

There are cases in which termination of the pregnancy is necessary because of serious maternal complications including haemorrhage and pre-eclampsia[13].

There is a possibility of a full-term delivery without complications, and it might be reasonable to continue the pregnancy[13].

Conclusion

In this case, the patient was referred to our radiology department at Ummaid hospital jodhpur for antenatal ultrasoundat the 16 week 3 days gestational week and it was too late in the gestation to undergo chorionic villous sampling.

Intermittent vaginal spotting was the only symptom suggesting the diagnosis of twin pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole, which frequently arises in cases of pregnancies with SCH.

We checked the elevated maternal serum b-hCG levels.

The condition, in this case, was diagnosed exactly before birth by ultrasound.

Although it was a very rare case of normal live pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole, the pregnancy was terminated because of risk of hemorrhage, risk of persistent trophoblastic disease and patient having completed their family.

The natural progress of a twin pregnancy with a normal live intrauterine fetus and coexistent of complete hydatidiform mole remains unknown.

Reporting this case and the ultrasound findings might be helpful for the earlier antenatal diagnosis and treatment in future cases.

Ethical Approval

This study is not animal experiments or experimental study. This is a case report. Informed consent was obtained from the patient.

Conflict of Interest

No conflict of interest was declared by the authors.

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