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Twin Pregnancy Consisting of a Complete Hydatiform Mole and Coexistent Normal Fetus: A Case Report

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ABSTRACT

Twin Pregnancy comprising of normal fetus and hydatidiform mole is a rare clinical entity. It is important to differentiate between partial mole and complete mole with a coexistent normal fetus as complete moles are associated with a considerably high risk of subsequent development of persistent trophoblastic disease. We present a case report of twin pregnancy consisting of a complete mole and coexistent normal fetus at 12 weeks of gestation with heavy vaginal bleeding.

Key words: Twin pregnancy, Complete mole, Gestational trophoblastic disease.

INTRODUCTION

Twin pregnancies comprising of a normal fetus and a hydatidiform mole are extremely rare occurrence in between 1:20,000 and 100,000 pregnancies.[1] Three different mechanisms are possible: A complete mole (diploid, all paternal in origin) co existent with a normal diploid fetus, A partial mole (triploid, maternal and/or paternal in origin)co existing with a normal diploid fetus, and a partial mole with an abnormal triploid, fetus (both having 69 chromosomes).[2] First two mechanisms represent dizygotic twin pregnancy and the coexistent fetus has a chance to survive. The third mechanisms represent monozygotic pregnancy and coexistent triploid fetus tends to die in the first trimester.

The current case was due to first mechanism (dizygotic twin pregnancy and coexistent fetus has a chance to survive). Morphology of villi and most importantly karyotypes help to make the differential diagnosis.[3]

Recognizing this pathological entity is very important clinically for patient management.

Patients with complete mole and coexistent fetus are associated with a considerably high risk of subsequent development of persistent trophoblastic tumor than a single complete mole.[4] Therefore; it should be carefully differentiated from triploid partial mole, with a relatively low risk of persistent trophoblastic disease.[5]

CASE REPORT

A 31 years old pregnant woman presented in Department of Obstetrics and Gynaecology, Fatima Memorial Hospital Lahore, at 12 wks of gestation with history of vaginal spotting since one and half months and heavy vaginal bleeding for last 12 hours. On examination, maternal tachycardia and hypotension was present and was pale. On abdominal examination fundal height was 16 weeks size. On pelvic examination, os was open and vesicular tissue seen with 200cc blood clots. Ultrasound showed an alive intrauterine fetus .of 11 weeks gestation with placenta fundo posterior upper mid uterine segment and a heterogeneous complex area measuring 11.8x4.8x7.1 cm in left lateral mid lower uterine segment - possibility of partial mole was given. She was anemic (Hb % 8.1 g/dl). Serum. BHCG was 652864 miu/ml. Chest X-ray was normal. Blood was arranged and suction evacuation was done. Approximately 500cc molar contents were evacuated (Fig. 1).

Than second sac ruptured and a complete fetus with normal placental tissue obtained (Fig. 2), submitted for histopathology.

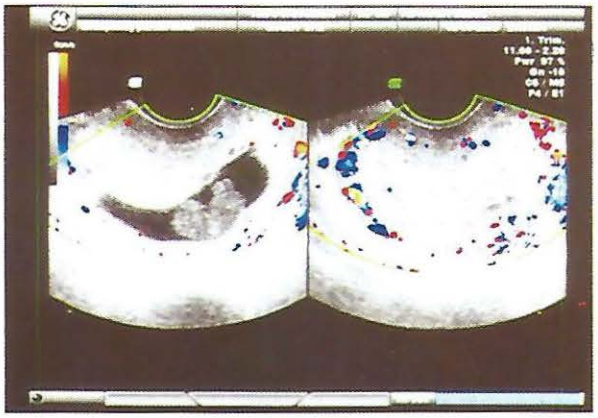

Fig. 1. Single intra-uterine fetus with CA +ve and a large slightly heterogeneous mass with small cystic changes surrounding the gestational sac- findings are suggestive of aneuploidy / partial mole.

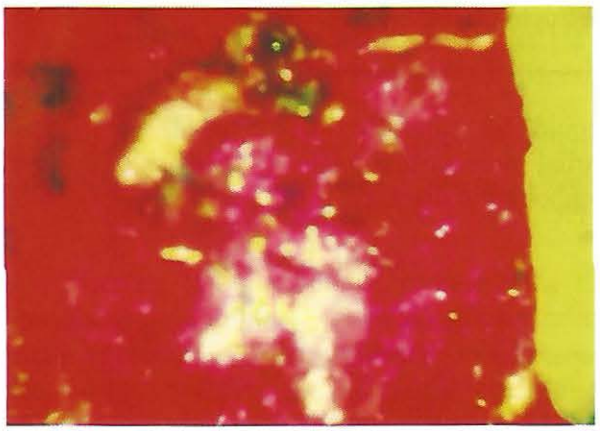

Fig. 2. Photograph showing a complete hydatidiform mole evacuated.

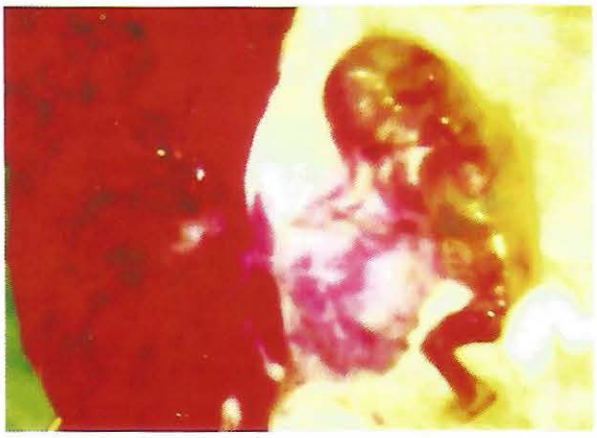

Fig. 3. Photograph showing a complete hydatidiform mole on left side and coexistent normal fetus with normal placental tissue on right side.

Histopathology report revealed a twin pregnancy with complete hydatidiform mole + a normal fetus and placental tissue. Postoperative follow up was done with serum BHCG after every 2 weeks, which was 7605 miu/ml after 2 weeks and 45miu/ml after 1 month and declines to <10 miu/ml within 8 weeks and a further follow up was done for 6 months which remains normal.

DISCUSSION

Twin pregnancy comprising of a normal fetus and a complete hydatidiform mole is a rare clinical entity. Only 77 confirmed cases have been seen yet at Charing Cross Hospital, London (largest centre for Trophoblastic tumor screening and treatment registering 1000 patients per year) established since 1973.[1] 25% of these resulted in a live birth while the remainder had non viable pregnancies which ended mostly in spontaneous abortions or suction D&Cs.[1] Patients are at increase risk of hemorrhage and medical complications as well as the development of persistent gestational trophoblastic tumor.[6]

Ploidy status needs to be determined to differentiate between partial mole (triploid -69 chromosomes) and a complete mole (diploid -46 chromosomes, all paternal origin) as complete mole has higher risk of subsequent development of persistent gestational trophoblastic tumor. The facility of these techniques is either non existent in most of institutions of Pakistan or not cost effective. So the definitive diagnosis is based on operative findings and histopathology.

Few cases with live childbirth have been reported in Literature. Makrydimas et al reported a novel case of complete hydatidiform mole and a normallivebirth at term.[7] Kauffman et al. reported a metastatic complete hydatidiform mole with a surviving co-existent twin at 28 weeks; at which time evidence of metastatic disease was identified. She delivered by caesarian section and post operative single agent chemotherapy was given.[8]

Our patient presented at 12 wks of gestation with heavy vaginal bleeding so suction evacuation was done and postoperative follow up remained uneventful.

REFERENCES

1. Michael J, Seckl, Edward S, Newlands. Gestational trophoblastic tumours. In: Robbert WS, Patrick S, Stuart LS, editors. Gynaecology. 3rd ed. Edinburgh: Elsevier Science; 2003: 657-659.
2. Altieri A, Franceschi S, Ferlay J, Smith J, La Vecchia C. Epidemiology and aetiology of gestational trophoblastic diseases (review). Lancet Oncol 2003; 4: 670-678.
3. Matsui H, Sekiya S, Hando T, Wake N, Tomoda Y. Hydatidiform mole co existent with a twin live fetus: a national collaborative study in Japan. Hum Reprod. 2000; 15: 608-11.
4. Sebire NJ, Foskett M, Paradinas FJ, et al. Out come of twin pregnancies with complete hydatidiform mole and healthy co-twin. Lancet 2002; 359: 2165-66.
5. Van de Kaa CA, Robben JC, Hopman AH, Hanselaar AG, Vooijs GP. Complete hydatidiform mole in a twin pregnancy: differentiation from partial mole with interphase cytogenetic and DNA cytometric analyses on paraffin embedded tissues. Histopathology. 1995; 26: 123-9.
6. Fishman DA, Padilla LA, Keh P, Cohen L, Frederiksen M, Lurain JR. Management of twin pregnancies consisting of a complete hydatidiform mole and normal fetus. Obstet Gynecol. 1998; 91: 546-50.
7. Makrydimas G, Sebire NJ, Thornton SE, Zagorianakou N, Lolis D, Fisher RA. Complete hydatidiform mole and normal live birth: a novel case of confined placental mosaicism: case report. Hum Reprod. 2002; 17: 2459-63.
8 Kauffman DE, Sutkin G, Heine RP, Watt-Morse M, Price FV. Metastatic complete hydatidiform mole with a surviving co existent twin. A case report. J Reprod Med 1999; 44: 131-4.

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