A bhcg of 1.9 million: A DCDA twin pregnancy with complete molar pregnancy and co-existing live fetus.

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Background

The co-existence of complete hydatiform mole (CHM) and live co-twin is rare, with reported incidence between 1 in 22,000-100,000 pregnancies(1). A CHM is gestational trophoblastic disease resulting from aberrant fertilisation causing abnormal proliferation of trophoblasts and markedly elevated bhCG (2). The associated sequelae includes hyperthyroidism, theca lutein cysts (TLCs) and early onset pre-eclampsia (2).

Discussion

Thyrotoxicosis, pre-eclampsia and theca lutein cysts are rarely observed in the first trimester of pregnancy. Our case demonstrates the serious medical and surgical complications clinicians must remain astute to when managing complex DCDA twin and molar pregnancies, regardless of the patient's gestation.

References

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2. Sun SY, Melamed A, Joseph NT, Gockley AA, Goldstein DP, Bernstein MR, Horowitz NS, Berkowitz RS. Clinical Presentation of Complete Hydatidiform Mole and Partial Hydatidiform Mole at a Regional Trophoblastic Disease Center in the United States Over the Past 2 Decades. Int J Gynecol Cancer. 2016 Feb;26(2):367-7

Case

A 33yo G3P2 presented locally with PV bleeding, beta-hCG 1,026,204IU/L and a pelvic ultrasound (USS) demonstrating 9/40 pregnancy with a live fetus and possible molar co-twin. She re-presented at 11/40 with PV bleeding, vomiting and epigastric pain. Serum beta-hCG was 1,972,240IU/L and was referred to our tertiary centre. Repeat USS demonstrated a Dichorionic Diamniotic (DCDA) pregnancy; twin A CRL 44.3mm 11+1/40, twin B comprising of multicystic hypervascular tissue suggestive of CHM (figure 1) with enlarged multifollicular ovaries 96x64x73mm/71x56x45mm (right/left) (figure 2).

Figure 1.Ultrasound at 11+1 weeks: molar pregnancy with coexisting twin

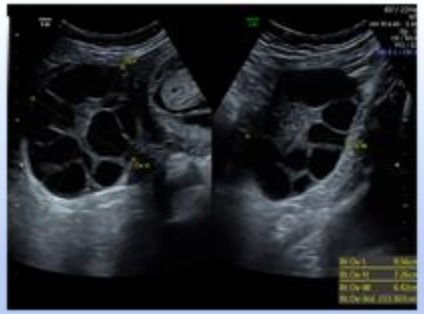

Figure 2. Ultrasound at 11 weeks: bilateral enlarged multi-follicular ovaries

Following counselling, our patient elected surgical termination of pregnancy. Pre-operatively, she developed hypertension 180/100mmhg with negative PET screen and evolving thyrotoxicosis (TSH <0.05mU/L, free T3 53pmol/L). USS guided D&C using misoprostol priming was performed without surgical complication. Post-operatively, she developed PET with neurological irritability and proteinuria (PCR 43g/mol creat). MgS04 was commenced and continued for 24 hours. She improved biochemically (beta-hCG 78,146, T3 36pmol/L) and clinically with oral antihypertensives. Histopathology and karyotyping confirmed DCDA twin pregnancy with normal fetus (46XY) and twin B a complete hydatiform mole (46XX).

Our patient re-presented day 19 with severe abdominal pain and USS showing bilaterally enlarged ovaries with theca lutein cysts and concern for right ovarian torsion. Emergency laparoscopic ovarian decompression and right ovarian de-torsion was performed (figure 3 and 4).

Figure 3: Right ovarian torsion

Figure 4. Ovarian decompression of theca lutein cysts

Post molar surveillance with weekly beta-HCG demonstrated return to negative in 12 weeks post D&C.