

EP12.57- Twin pregnancy with complete mole and live fetus following ICSI: diagnostic and management challenges

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Background

Twin pregnancy with a complete hydatidiform mole and coexisting live fetus is rare. Occurrence following IVF-ICSI is exceptionally uncommon because fertilisation is controlled. We report a case highlighting the diagnostic, management and biological challenges

Case Presentation

A woman in her late 30s with 8-year of unexplained primary subfertility conceived following intracytoplasmic sperm injection (ICSI) after transfer of two frozen embryos without preimplantation genetic testing. Early scan suggested a vanished twin; however at 12 weeks, a DCDA twin was demonstrated, comprising one normal fetus and a separate complete molar pregnancy. Bilateral theca lutein cysts were present, and the β -hCG level was >100,000 IU/L. (Figure 1-3)

Clinical Course

Following counselling, further genetic tests were not performed and the couple chose to continue the pregnancy. At 13 weeks she developed hypertension and biochemical hyperthyroidism, managed with a beta-blocker. At 14 weeks, heavy vaginal bleeding necessitated pregnancy termination following multidisciplinary discussion. Histology confirmed a twin pregnancy with complete hydatidiform mole, and β -hCG normalised within 42 days. The patient plans future embryo transfer.

Discussion

Complete moles are androgenetic. Following ICSI, the usual dispermy mechanism is unlikely, suggesting paternal chromosomal duplication or a dinucleated sperm as possible mechanisms. Histopathology remains the diagnostic gold standard.

Clinical Significance

This case illustrates the rapid development of serious maternal complications, including theca lutein cysts, hypertension, hyperthyroidism and haemorrhage, requiring multidisciplinary management and post-evacuation β -hCG surveillance

Learning Points

- Complete mole with a coexisting live fetus can occur after ICSI.
- Repeat specialist ultrasound is essential when a presumed vanishing twin has atypical features.
- Early maternal complications may require prompt pregnancy termination.
- Histopathology confirms the diagnosis, and β -hCG follow-up is essential.

References

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Figure 1. Ultrasound at 12 weeks demonstrating a live fetus within one gestational sac and abnormal multicystic molar tissue within the separate sac in a DCDA twin pregnancy.

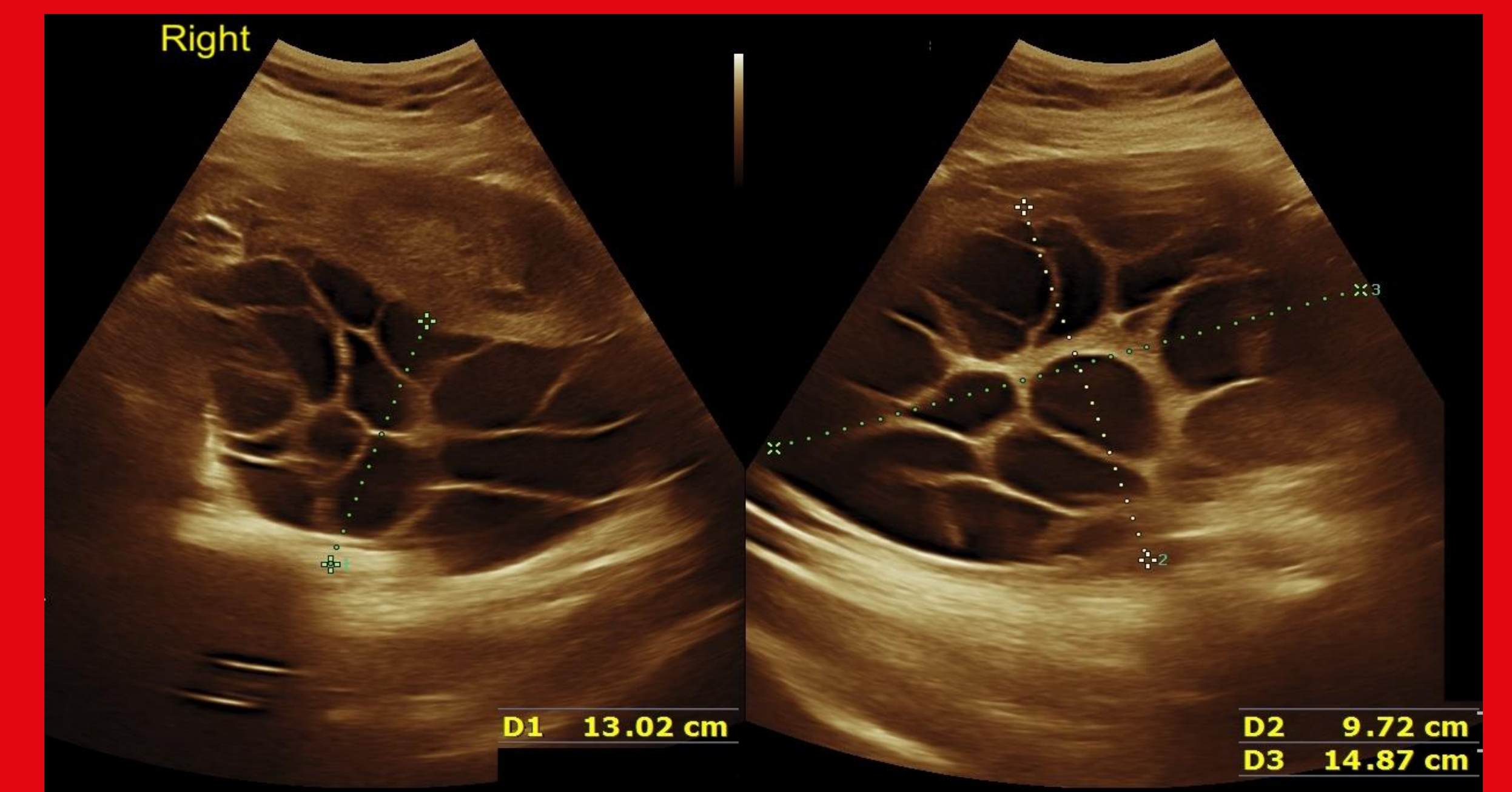


Figure 2. Enlarged multicystic ovaries consistent with theca lutein cysts



Figure 3. Gross specimen following termination demonstrating the fetus and separate vesicular molar tissue