

Mirror Image Artefact Mimicking Heterotopic Abdominal Pregnancy at 17 Weeks' Gestation: A Diagnostic Challenge

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BACKGROUND

Mirror image artefacts are uncommon ultrasound phenomena resulting from reflection of the ultrasound beam from highly reflective interfaces. In obstetric Imaging, they may mimic pathological conditions and lead to diagnostic uncertainty

CASE PRESENTATION

- 17-week singleton pregnancy referred for routine ultrasound examination.
- Normal intrauterine pregnancy with appropriate fetal biometry and anatomy.
- Additional gestational-like image visualized outside the uterine cavity.
- Initial suspicion of heterotopic abdominal pregnancy.

DIAGNOSTIC ASSESSMENT

- Transabdominal ultrasound
- Transvaginal ultrasound
- Variation of insonation angles
- Maternal repositioning
- Image depth optimization
- Correlation with clinical and anatomical findings
- Dynamic real-time assessment



Figure 1A–B. Apparent extrauterine fetal image representing a mirror image artefact.

KEY FINDINGS

- ✓ Synchronous movements of both images
- ✓ Limb movements mirrored in direction
- ✓ Appearance across a reflective interface
- ✓ Resolution after probe repositioning
- ✓ No independent fetal activity identified
- ✓ Absence of independent placental or vascular supply

DISCUSSION

The duplicated structure exhibited identical movement and vascular characteristics to the intrauterine fetus . Disappearance of the image following alteration of the insonation angle confirmed a mirror image artefact rather than an extrauterine pregnancy.

CONCLUSION

Mirror image artefacts may closely mimic heterotopic abdominal pregnancy. Recognition of synchronous mirrored fetal movements and disappearance of the duplicated image following probe manipulation are key features that help establish the correct diagnosis.



TAKE-HOME MESSAGE

When an apparent extrauterine fetus demonstrates synchronous mirrored movements and disappears with changes in insonation angle, a mirror image artefact should be strongly suspected.