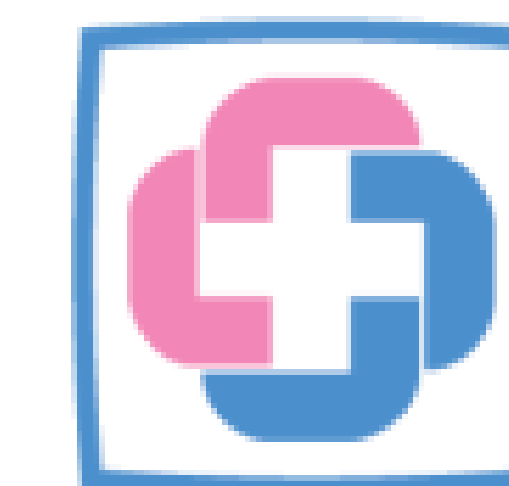


Isolated right tubal torsion in pregnancy mimicking an adnexal cyst: An educational case report.

J.C. Balisnomo, E. Tangtra, M. Seng, D. Teh

Department of Diagnostic and Interventional Imaging, KK Women's and Children's Hospital



KK Women's and
Children's Hospital
SingHealth



Introduction

- Isolated tubal torsion is a rare cause of abdominal pain in pregnancy. [1]
- It may mimic an adnexal cyst or ovarian pathology on ultrasound, making pre-operative diagnosis challenging. [1,3,4]



Objective

This report aims to highlight the importance of meticulous sonographic evaluation in distinguishing isolated tubal torsion from ovarian pathology.



Case Presentation

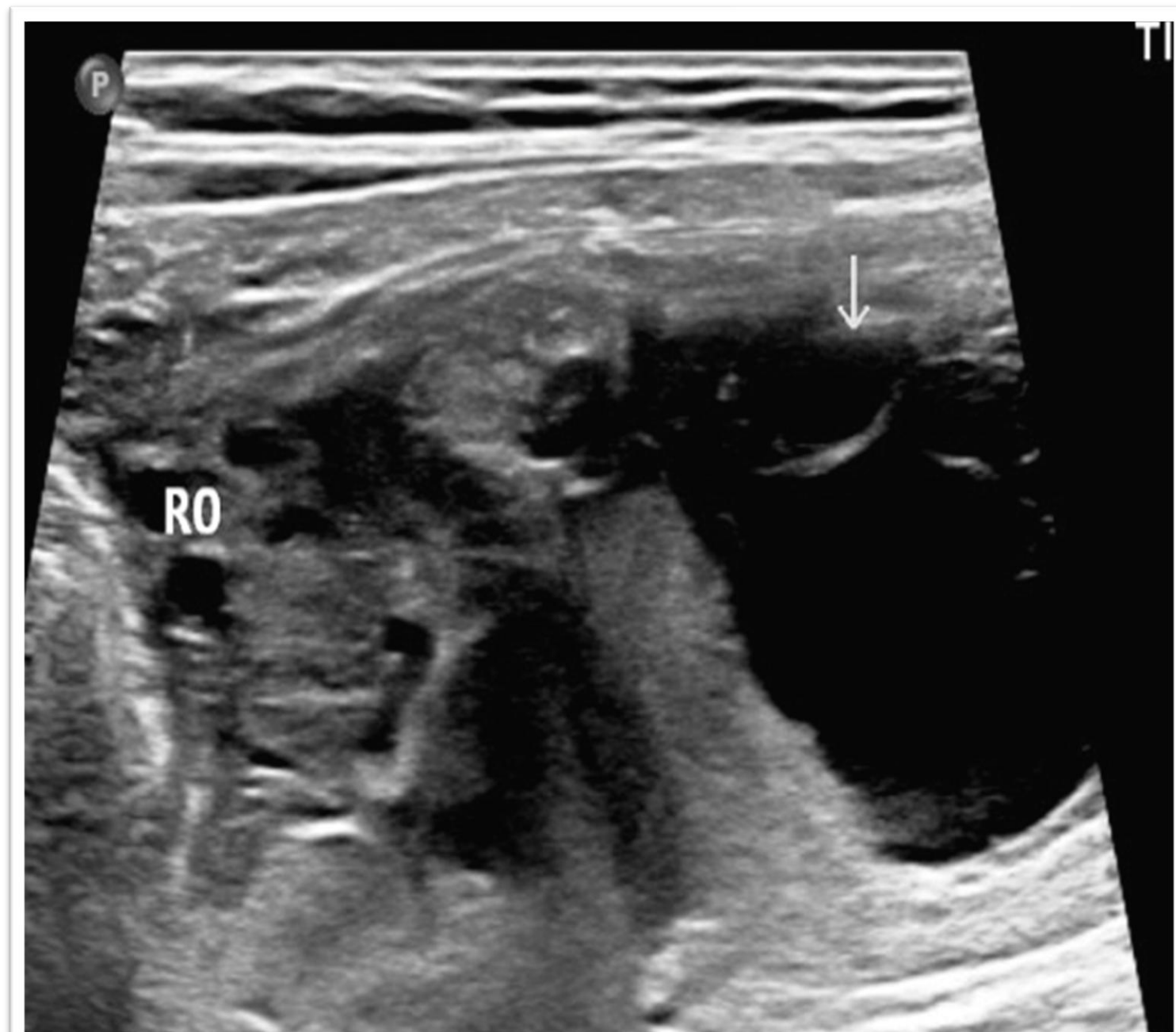
- 34-year-old woman
- 25 weeks' gestation
- Presented with acute right iliac fossa pain

KEY SONOGRAPHIC FINDINGS IN ISOLATED TUBAL TORSION

1

Cystic tubular structure separate from ipsilateral ovary

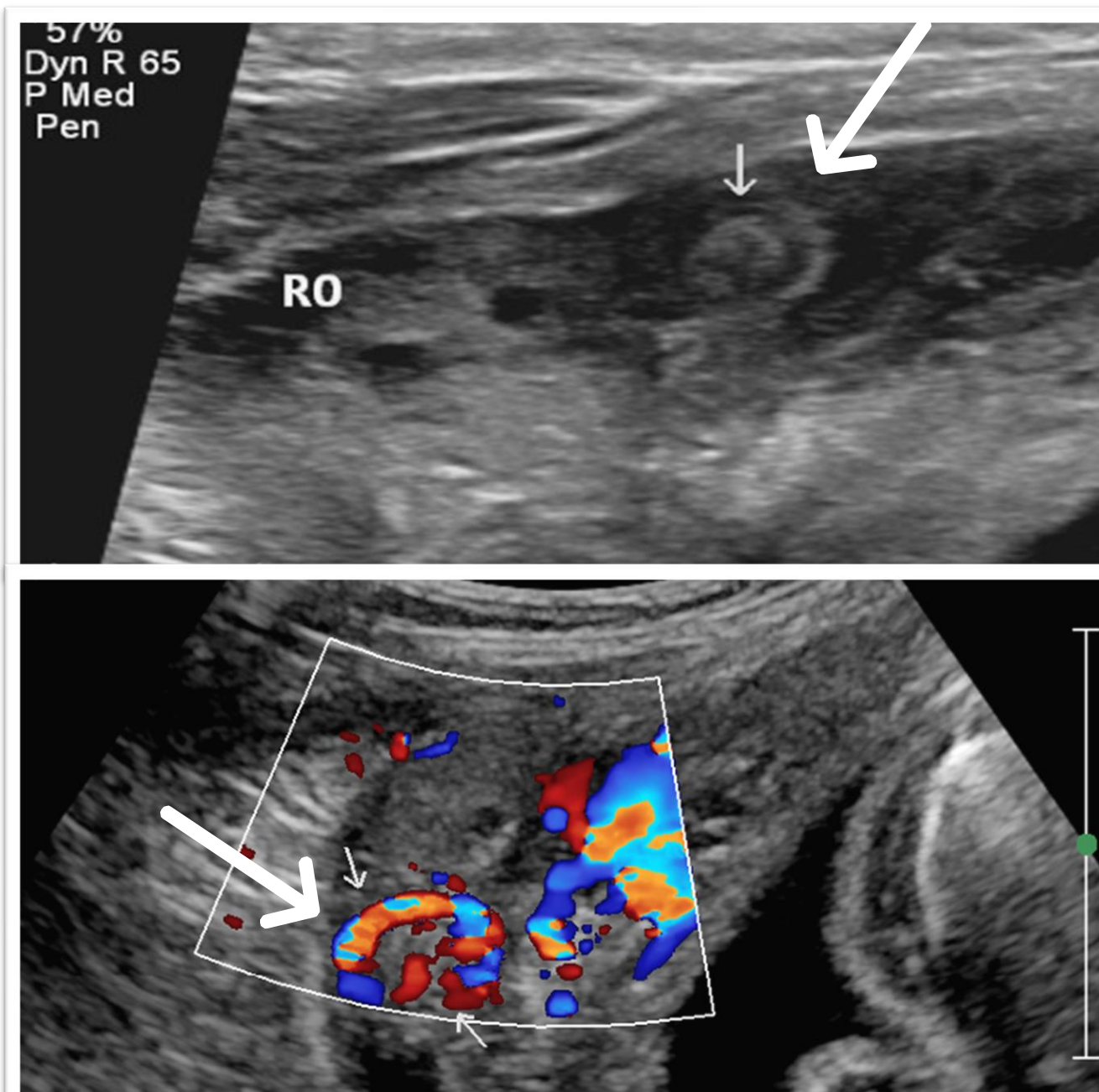
A cystic adnexal structure separate from a morphologically normal ipsilateral ovary suggests a tubal rather than ovarian origin. [1,3,4]



2

Whirlpool sign

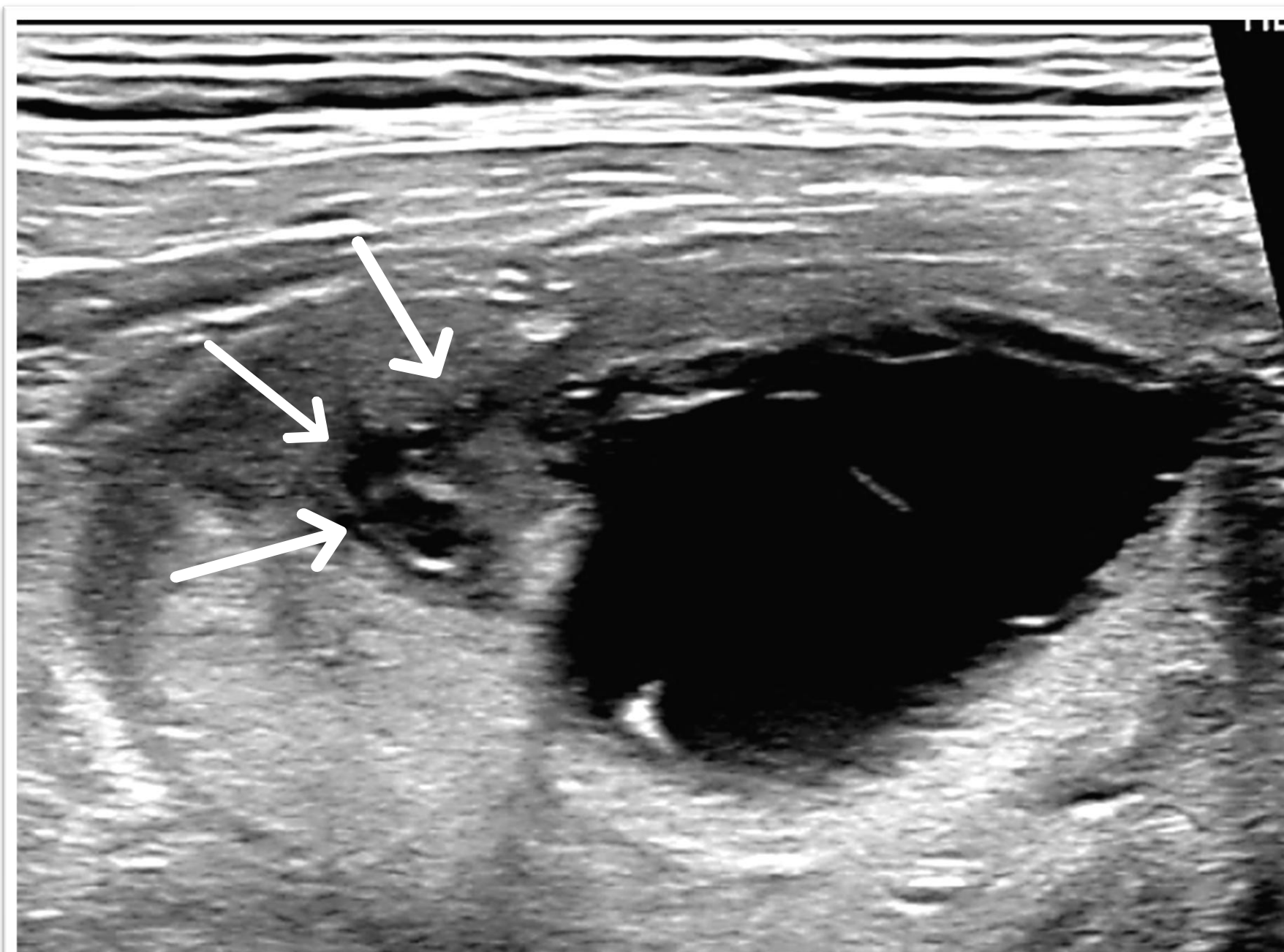
Twisting of the tubal vascular pedicle ("whirlpool sign") (white arrows), a highly suggestive sonographic feature of isolated tubal torsion. [2,3]



3

Mucosal folds / septations

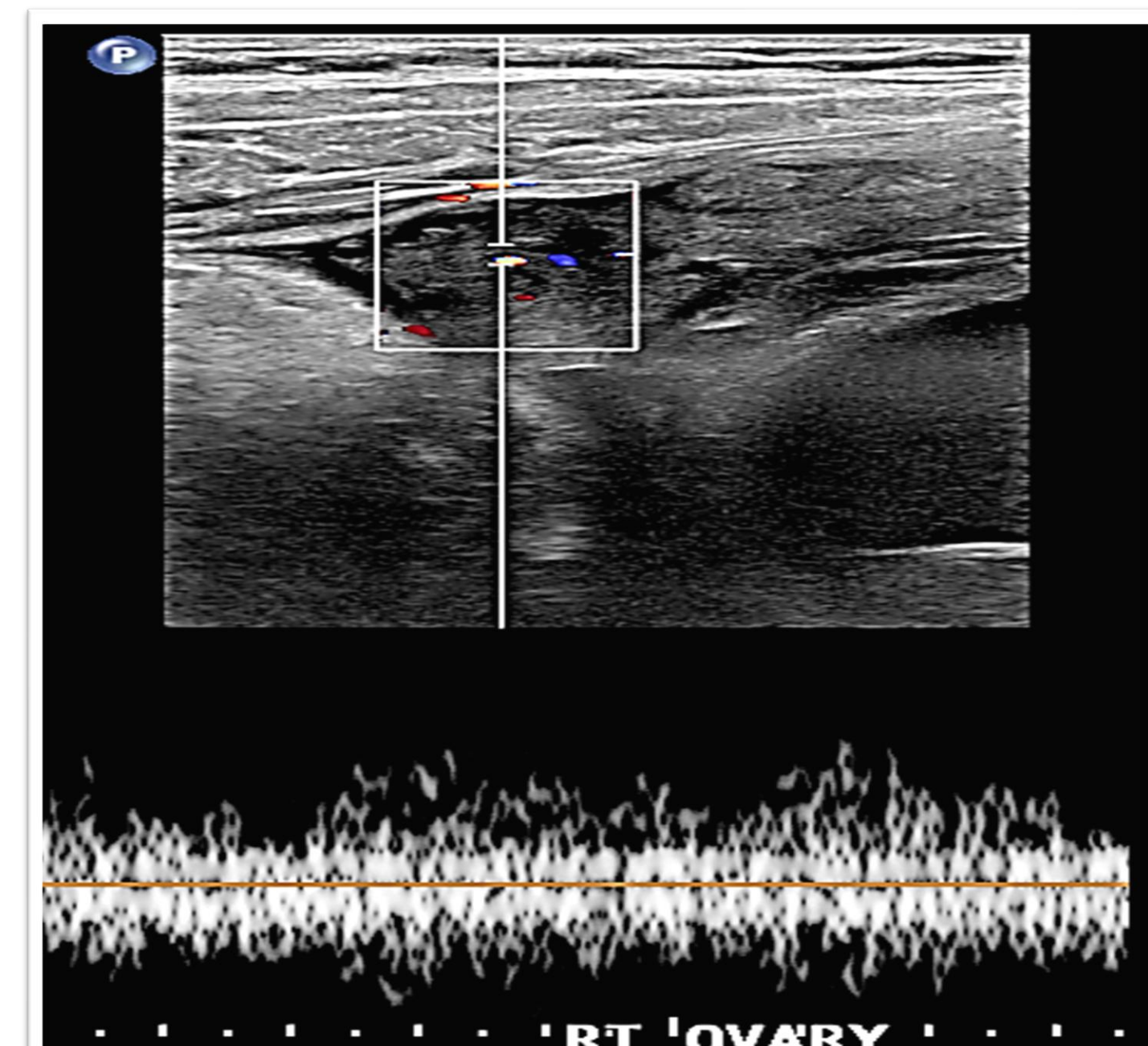
Thickened mucosal folds or septations within a dilated tube may produce a cogwheel-type appearance (white arrows), supporting tubal origin. [3]



4

Normal ipsilateral ovary

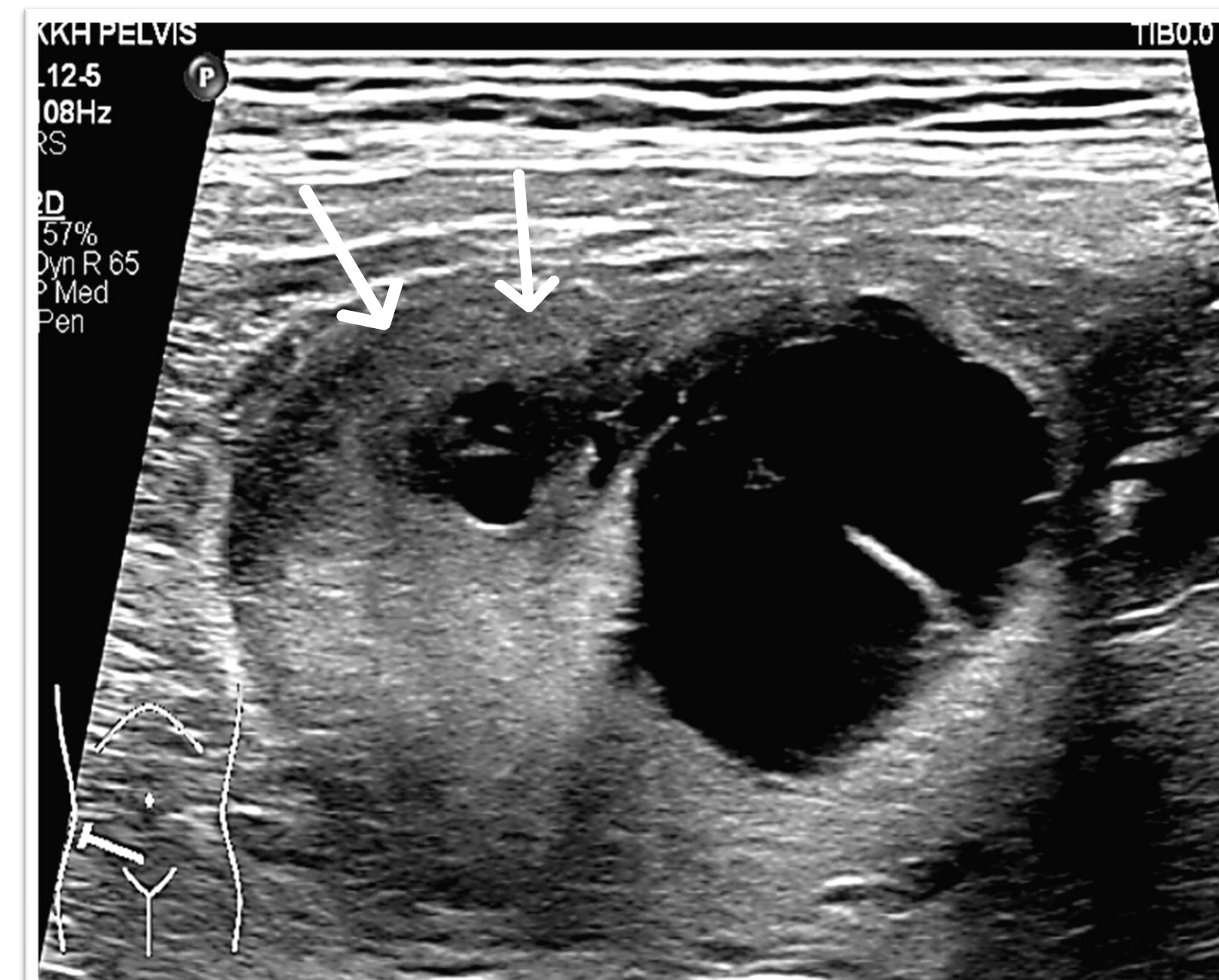
Identification of a normal ipsilateral ovary with preserved vascularity supports a tubal rather than ovarian origin of the adnexal lesion. [1-3]



5

Thickened, oedematous tubal wall

Tubal wall thickening and oedema/congestion (white arrows) may occur with isolated tubal torsion. [1,3]



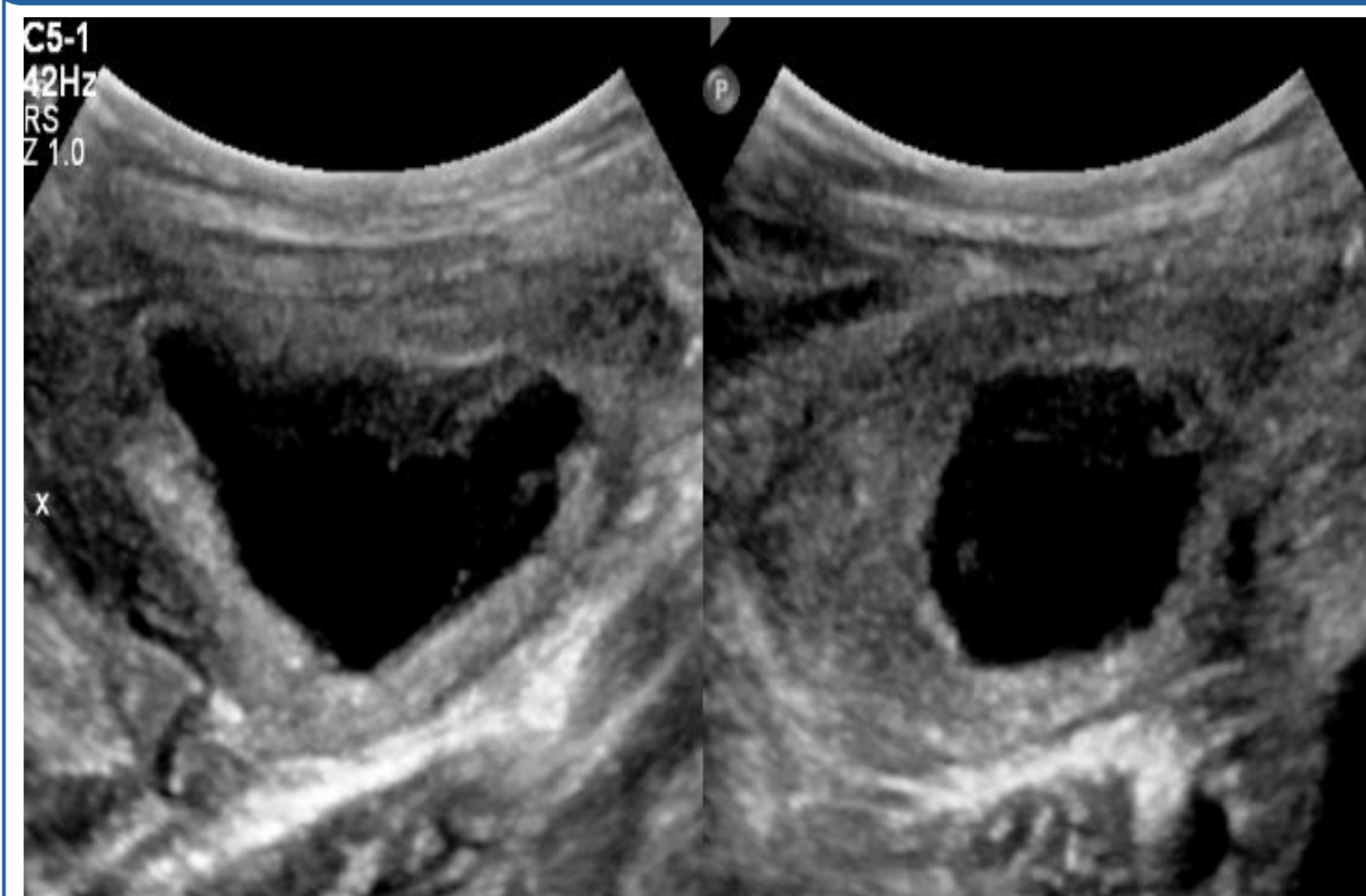
SURGICAL

- Right fallopian tube torsion with complete twisting
- Extensive haemorrhagic infarction with focal acute inflammation
- Intraoperative diagnosis: isolated right tubal torsion
- Right salpingectomy performed

FINDINGS

In pregnant patients presenting with acute unilateral pelvic pain, identification of a normal ipsilateral ovary should prompt careful evaluation of the fallopian tube for features of isolated tubal torsion. [1,3]

SEQUENTIAL SONOGRAPHIC ASSESSMENT

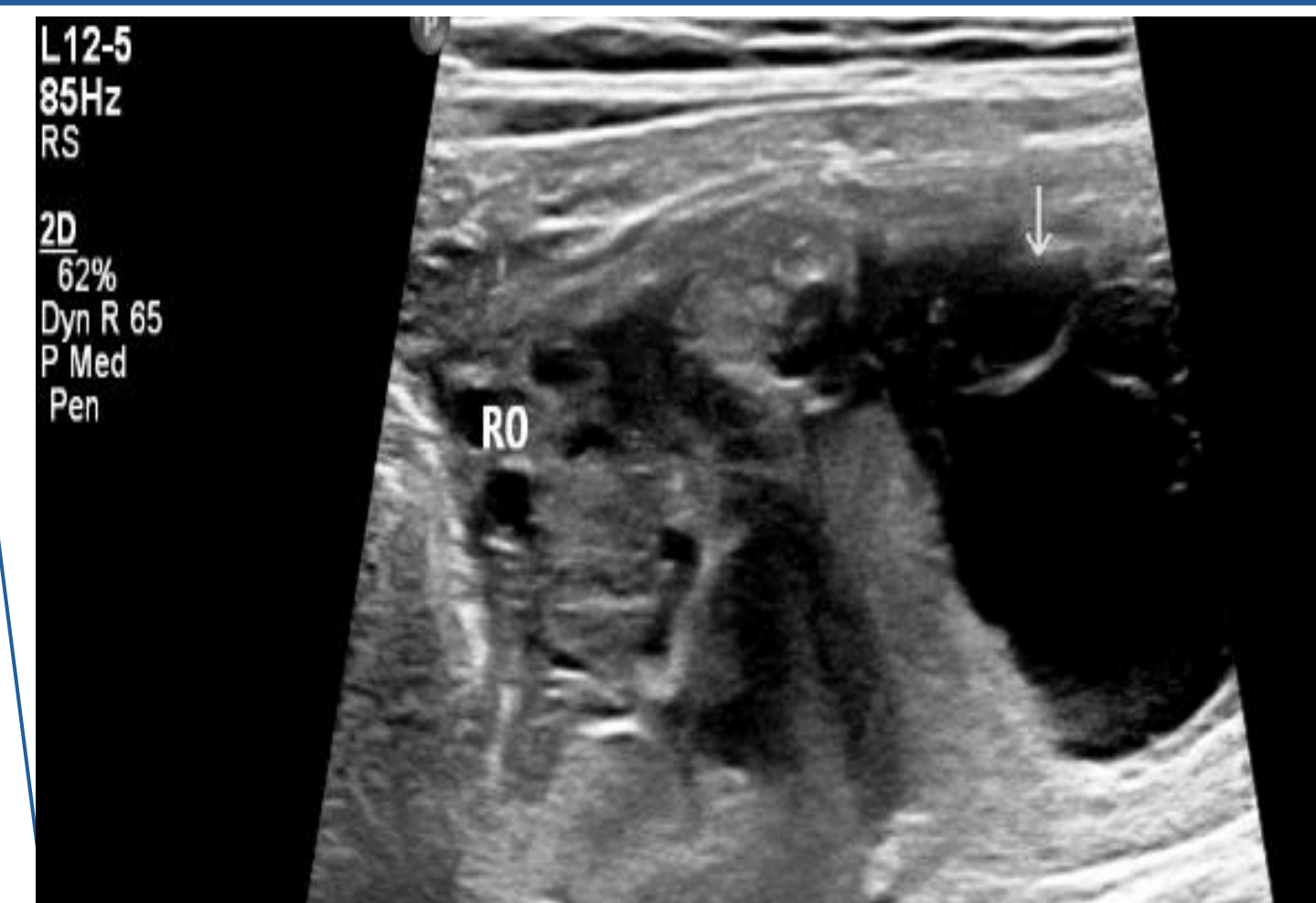


1. Curvilinear probe

Assessment was limited by the gravid uterus at 25 weeks' gestation. A cystic structure initially presumed to represent the right ovary.

2. Linear probe

Further assessment using high-resolution probe revealed a cystic structure separate from the normal-appearing right ovary, raising suspicion for a tubal origin.



CONCLUSION

In this case, recognising the normal ipsilateral ovary and subtle tubal abnormalities was key to identifying isolated tubal torsion. Careful attention to tubal origin can prevent an ovarian mimic from obscuring the diagnosis.

REFERENCES

- Gulino FA, Ettore C, Morreale G, Siringo S, Russo E, D'Asta M, Cannone F, Ettore G. Isolated Tubal Torsion in a Term Pregnancy: Case Report and Systematic Review of Literature of the Last 10 Years. *Front Surg*. 2022;9:856915. doi:10.3389/fsurg.2022.856915.
- Vijayaraghavan SB, Senthil S. Isolated torsion of the fallopian tube: the sonographic whirlpool sign. *J Ultrasound Med*. 2009;28(5):657–662. doi:10.7863/jum.2009.28.5.657.
- Revzin MV, Moshiri M, Katz DS, Pellerito JS, Mankowski Gittle L, Menias CO. Imaging Evaluation of Fallopian Tubes and Related Disease: A Primer for Radiologists. *RadioGraphics*. 2020;40(5):1473–1501. doi:10.1148/rg.2020200051.
- Khairnar V, Valecha SM, Pandeewari. Isolated twisted hematosalpinx misleading with ovarian cyst torsion. *Int J Reprod Contracept Obstet Gynecol*. 2019;8(3):1219–1222. doi:10.18203/2320-1770.ijrcog20190911.

A cystic adnexal lesion is not always ovarian in origin. Careful scanning improves diagnostic accuracy.