

A CASE OF SYMPTOMATIC HYPERREACTIO LUTEINALIS CAUSING SIGNIFICANT LEG LYMPHOEDEMA

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Objective

To report an interesting case of hyperreactio luteinalis (HL) in a spontaneously conceived singleton pregnancy, diagnosed in the third trimester and causing significant leg lymphoedema.

Method

Case report. We describe the clinical presentation and challenges in the diagnosis and management of a 36 year-old primigravida, who presented to the obstetric unit in her third trimester with painful and swollen legs and was noted to have bilateral enlarged multicystic ovaries.

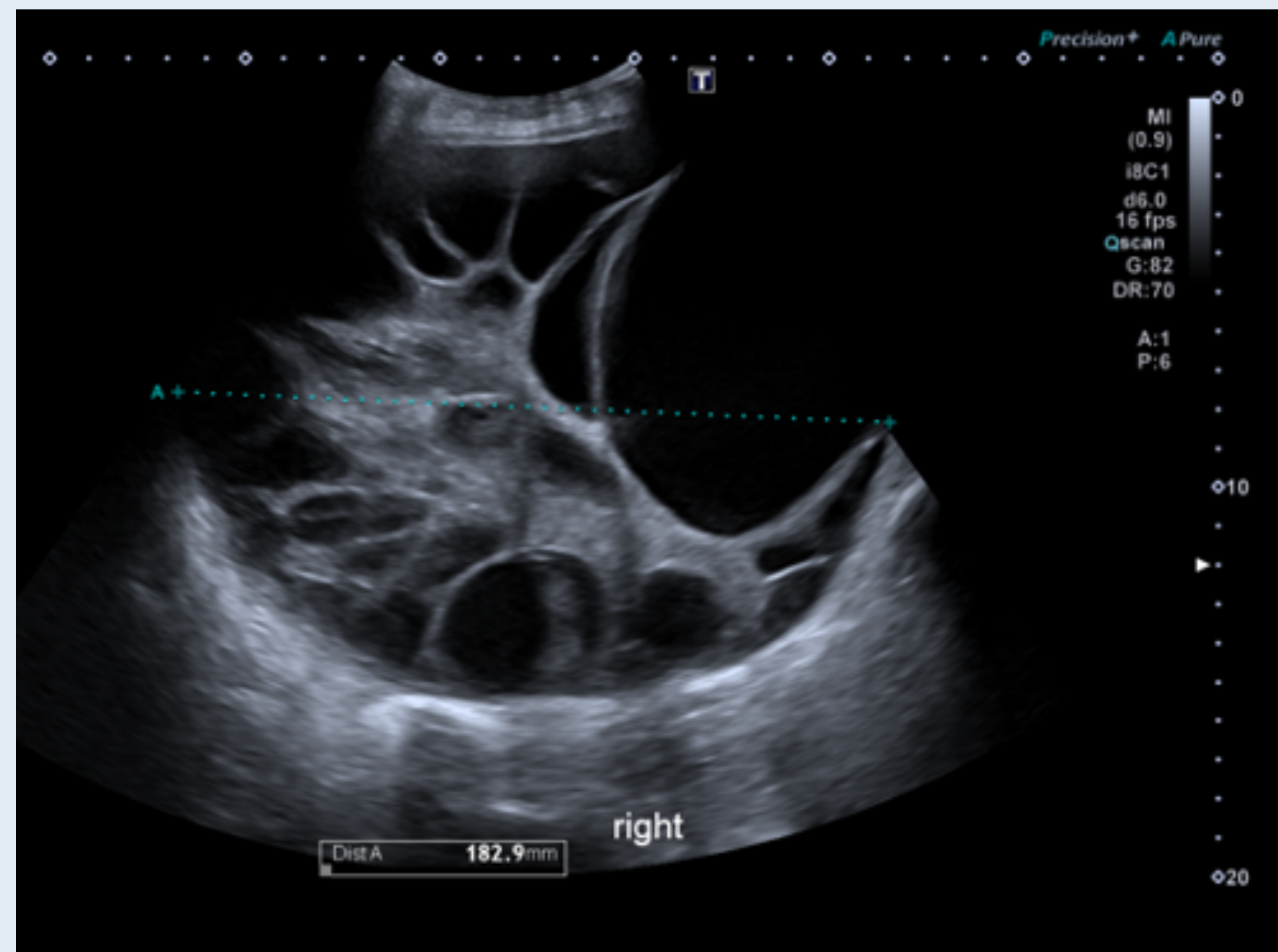


Figure 1. Scan at 34+5 weeks' gestation: enlarged multicystic right ovary, measuring 183x247x150mm, with characteristic 'spoke-wheel' appearance

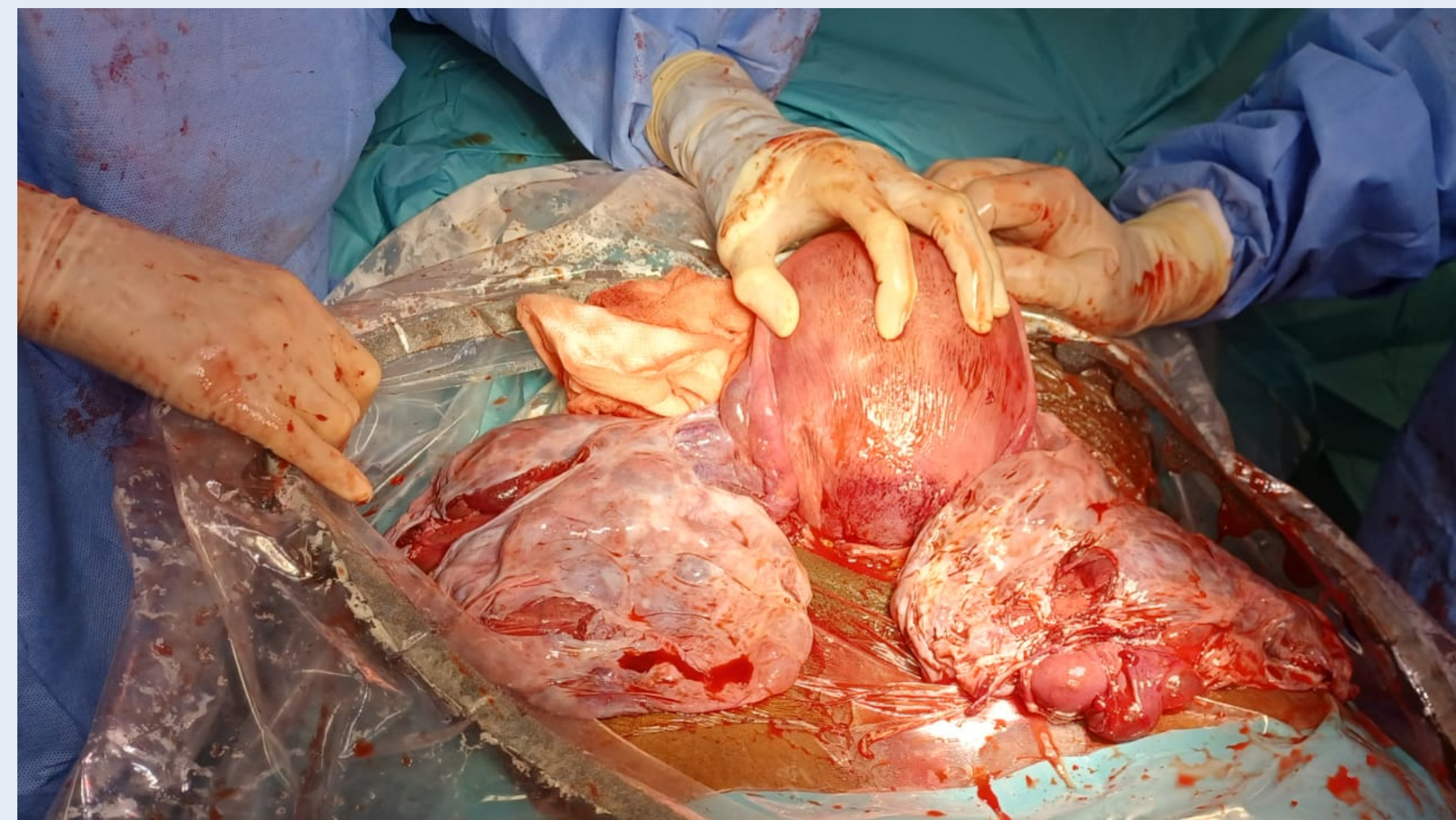


Figure 2. Caesarean section at 36+2 weeks' gestation: appearance of bilateral enlarged ovaries after drainage and decompression of cysts following closure of uterus

Results

The diagnosis of hyperreactio luteinalis was put forward in view of the ultrasound findings of grossly enlarged ovaries containing multiple thin walled cysts filled with hypoechoic fluid and containing no solid components, giving the characteristic 'spoke-wheel' appearance (*Figure 1*). This was confirmed on magnetic resonance imaging (MRI) scan. The patient was known to have a background of polycystic ovarian syndrome (PCOS), with previously reported anovulatory cycles, hirsutism and polycystic ovaries. Maternal virilisation can occur in 30% of pregnancies complicated by HL. Our patient developed a deepening of her voice, clitoromegaly, with raised testosterone levels of 52nmol/L (normal range < 1.8nmol/L). Her tumour markers (CA-125, AFP, CEA) were, however, unremarkable. Her pregnancy was also complicated by gestational hypertension.

We performed a caesarean section at 36+2 weeks' gestation as the patient was deemed to be at high risk of venous thromboembolism (VTE) as her pregnancy advanced and she was symptomatic with considerable lower limbs lymphoedema. She delivered a healthy male infant of 2780g. At the time of caesarean section, her ovaries were noted to extend to her xiphisternum (*Figure 2*). With the patient's written consent, her ovaries were decompressed and the largest cysts drained of over 3 litres of straw-coloured fluid, to reduce the risk of complications such as ovarian torsion, pressure symptoms, cyst rupture or haemorrhage. Her recovery was uneventful and her leg swelling significantly improved the following day.

Conclusion

Hyperreactio luteinalis is a pregnancy-related benign condition characterised by significant bilateral enlargement of ovaries with multiple theca lutein cysts. Awareness of this rare entity is important to avoid drastic measures such as oophorectomies. While the cysts will resolve spontaneously following birth, HL can recur in subsequent pregnancies. Conservative management may be appropriate but an individual management approach is recommended according to the patient's symptoms.

References

Skandhan AK, Ravi V. Hyperreactio luteinalis: An often mistaken diagnosis. *Indian J Radiol Imaging* 2014;24:84-6.
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