



# Incidentally Detected Hyperreactio Luteinalis Mimicking Meig's Syndrome

Dakshin Sitaram Padmanabhan<sup>1</sup> · Janu Mangala Kanthi<sup>2</sup>

Received: 26 June 2020 / Accepted: 7 November 2020 / Published online: 3 January 2021  
© Federation of Obstetric & Gynecological Societies of India 2021

Hyperreactio luteinalis is a rare entity described by bilateral cystic ovarian enlargement during pregnancy, which is benign in nature. It is caused due to elevated human gonadotropins and is often associated with conditions such as gestational trophoblastic disease, foetal hydrops and multiple gestations. It can be easily mistaken for a neoplasm and hence may be operated upon unnecessarily.

Here, we report the case of a 33-year-old primigravida with singleton pregnancy, who presented with spontaneous onset of significant vulvar oedema. The abdomen was over-distended. Ultrasound showed singleton, normally growing foetus and large bilateral multiloculated ovarian cysts of around 15 cm on each side, ascites and pleural effusion. Pleural effusion was also visualized on chest X-ray (Fig. 1). MRI 3D confirmed these findings showing a characteristic “bunch of grapes” appearance (Figs. 2, 3). The patient was

symptomatically managed and the size of the cysts regressed nearing term.

At 38 weeks, she was taken up for Caesarean section due to failed induction; ovarian cystectomy was also performed. Intraoperatively, the size of the ovaries was found to be 6 cm on each side (Fig. 4). Histopathological examination of the cyst wall was done. The histopathological findings showed the cyst wall lined by luteinised granulosa cells with eosinophilic cytoplasm and ovarian stroma with clusters of luteinised cells suggestive of a large solitary luteinised follicular cyst of pregnancy (Fig. 5).

Awareness about the condition and systematic antenatal evaluation and follow-up can prevent unnecessary radical surgery.

---

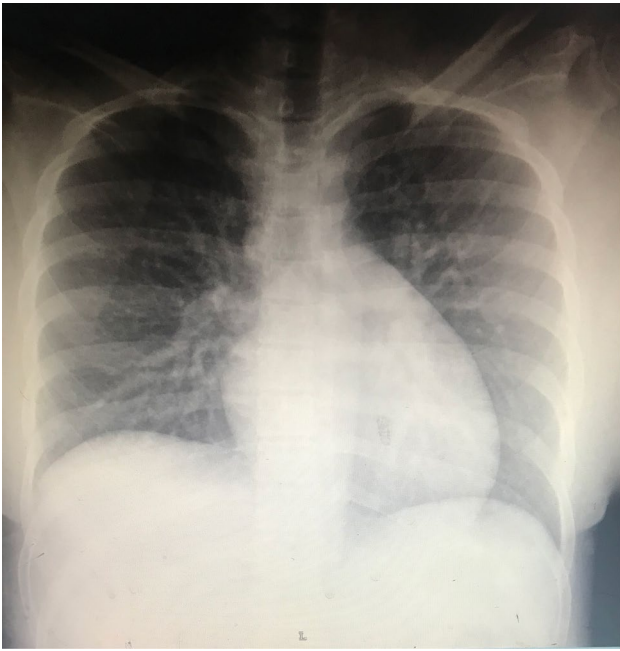
Dakshin Sitaram Padmanabhan is currently a House Surgeon at Amrita Institute of Medical Sciences and Research Centre, Kochi, India; Dr. J. Mangala Kanthi is an Associate Professor at the Department of Obstetrics and Gynaecology, Amrita Institute of Medical Sciences and Research Centre, Kochi, India.

---

✉ Dakshin Sitaram Padmanabhan  
dakshin.padman@gmail.com

<sup>1</sup> Amrita Institute of Medical Sciences and Research Centre, Kochi, India

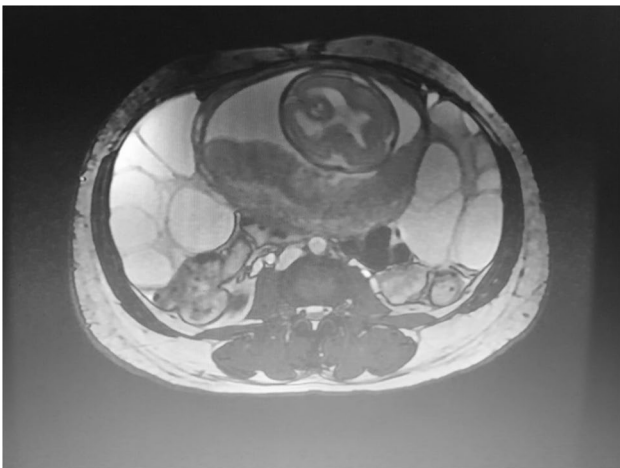
<sup>2</sup> Department of Obstetrics and Gynaecology, Amrita Institute of Medical Sciences and Research Centre, Kochi, India



**Fig. 1** Chest X-ray at the time of symptomatic presentation at 24 weeks showing bilateral pleural effusion (R>L)



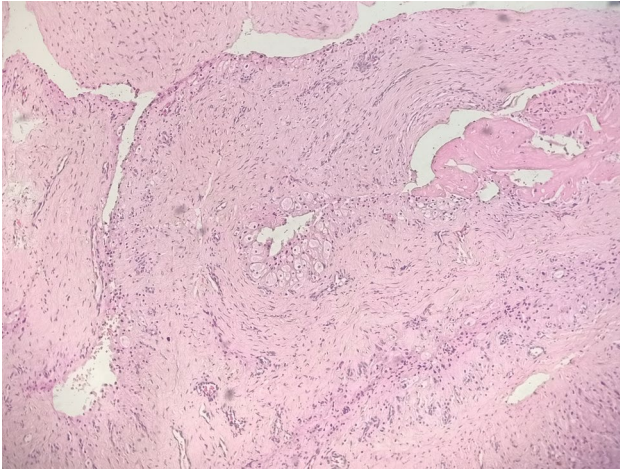
**Fig. 3** MRI 3D showing the multicystic lesions with characteristic “bunch of grapes” appearance occupying the entire abdominal cavity



**Fig. 2** MRI pelvis showing bilateral adnexa with multicystic lesions of 15 cm size and a singleton pregnancy



**Fig. 4** Intraoperative picture of the cystic ovaries which regressed to a size of 6 cm at term



**Fig. 5** Histopathological slide of the cyst wall lined by luteinised granulosa cells with eosinophilic cytoplasm and ovarian stroma with clusters of luteinised cells

**Funding** Not applicable. No funding was required for conducting this report.

### Compliance with ethical standards

**Conflict of interest** All authors declare that they have no conflict of interest, financial or otherwise.

**Informed consent** Informed consent was obtained from the patient in this report. Written consent has been taken from her for reporting this case and care has been taken not to divulge any identifying information.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

### About the Author



**Dr. Dakshin Sitaram Padmanabhan** is currently a House Surgeon at Amrita Institute of Medical Sciences, Kochi. He has been involved in research in his institution for the last 2 years. His interests lie in the field of gynaecological oncology and he has recently published a paper in the field. He also has an interest in rare cases which happen to occur at his institution, which he could share with the rest of the medical community. He plans to pursue his higher studies abroad once he completes his course.