Metastatic colorectal cancer as a cause of deranged liver function in pregnancy

Health Northern Sydney Local Health District — NSW Government

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Case Summary

Introduction

KG, a previously **well 35-year-old G2P1**, was referred to hospital at **33+2** with **deranged liver function** identified during outpatient investigation of one month of diarrhoea. In retrospect, she noted fatigue and scant per rectal bleeding, attributed to haemorrhoids.

KG's **pregnancy was otherwise uncomplicated**, and investigations including morphology ultrasound were normal. Family history was unremarkable.

Evaluation

- *Examination:* Pallor, and **palpable hepatomegaly**, which had not previously been noted
- *Blood tests:* Hb 96, ALP 969, GGT 243, AST 147, **CEA 15610,** Ca 124 121, Ca 19.9 92285, CRP 233
- *Imaging*: Fetal growth and wellbeing ultrasound noted **echogenic liver lesions** (Figure 1), confirmed on upper abdominal ultrasound
- *Liver lesion biopsy:* **Colorectal adenocarcinoma**

Management

Induction of labour, and vaginal delivery of a healthy baby boy, occurred at 34+0. Dose-reduced FOLFOX **chemotherapy** was commenced, with good response. Malignant **bowel obstruction** was sadly diagnosed at 32 days post-partum. Comfort-focused care was pursued, and KG passed away surrounded by family.

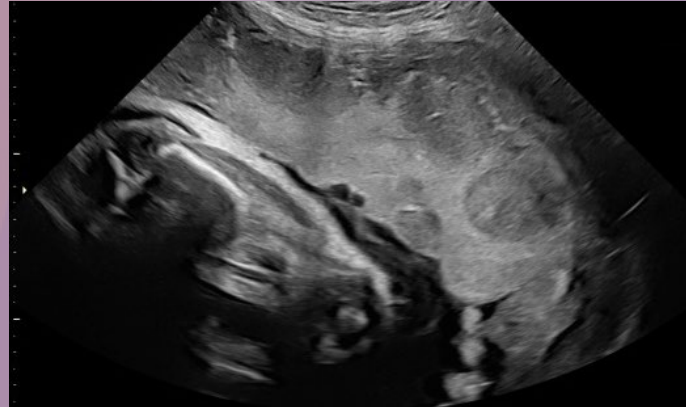

Figure 1: Liver metastases identified on KG's obstetric growth and wellbeing ultrasound

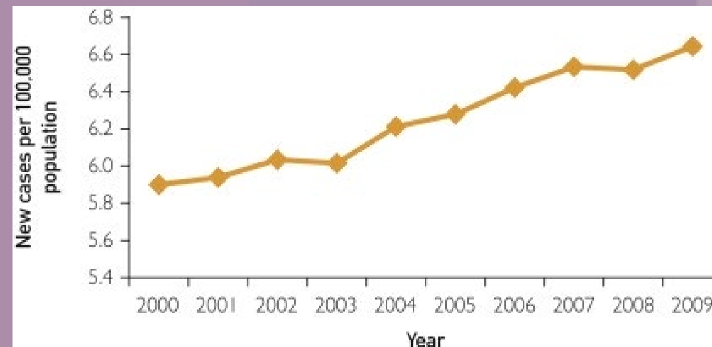

Figure 2: Incidence of colorectal cancer among Americans <50 years old, 2000-2010 *(Source: Ahnen et al, 2014)*

Case Discussion

Discussion

The **incidence of colorectal cancer (CRC) is increasing** among women of childbearing age, who often do not meet criteria for screening (Figure 2).

Pregnancy may **mask typical features** of CRC, including bloating, gastrointestinal upset, and PR bleeding. Pregnant women diagnosed with CRC are more likely to have delayed diagnosis and advanced disease,[1] with one systematic review demonstrating that 48% had **metastases at time of diagnosis**.[2]

Learning Points

- Although rare, malignancy is an **important cause of morbidity and mortality** in pregnancy
- Obstetric care providers should have a **high index of suspicion** for CRC to enable prompt diagnosis and treatment, particularly in the context of mixed modality (telehealth and in-person) antenatal care

Acknowledgements

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References

[1] Kocian et al. *Management and outcome of colorectal cancer during pregnancy. 2019.* Acta Chir Belg.

[2] Pellino et al. *Colorectal cancer diagnosed during pregnancy.* 2017. Eur J Gastroenterol Hepatol.