Ruptured Hepatocellular Adenoma in Pregnancy: Navigating Maternal-Fetal Conflict

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Hepatocellular adenoma (HCA)

- Rare, benign liver tumor
- Most common in women of child-bearing age
- Associated with estrogen [1] (oral contraceptive users)

- **Complications**
  - –Hemorrhage, rupture, malignant transformation [2]
  - –Hyperestrogenic states increase risk of lesion growth, potential rupture
  - –Risk is further amplified by increased liver vascularity and hyperdynamic circulation
- **Mortality**
  - –HCA rupture in lesions >6.5cm: Maternal mortality 44%, fetal mortality 38% [3]

- **Treatment guidelines**
  - –Surgical resection of lesions >5cm

Management of peripartum HCA must be individualized given dynamic changes of pregnancy, high risk of maternal and fetal morbidity & mortality

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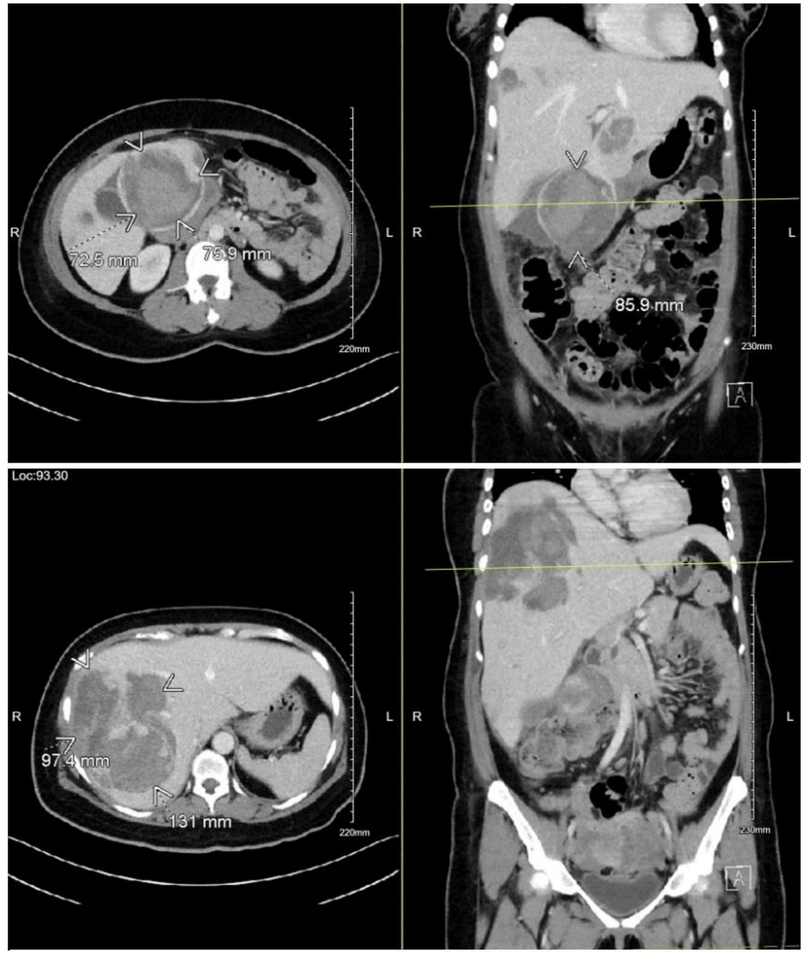
- 38yo multigravida, 19w1d
  - Abdominal pain, hypotension & tachycardia
  - **Multiple bilateral HCAs**
    - Evidence of rupture (>8cm), hemoperitoneum → Emergent embolization
- Re-presented, 20w1d
  - **Interval enlargement** of right lobe mass (>11cm) → Embolization
  - **Continued growth**
  - Multidisciplinary planning:
    - Not a candidate for resection
    - Embolization not recommended, risk additional **compromised hepatic blood flow & subsequent hepatic failure**
    - Not a transplant candidate given funding status
    - Termination of pregnancy recommended to **remove estrogen source**
  - 20w4d, **uncomplicated hysterectomy w/ bilateral salpingectomies**
    - GETA, 2 large-bore PIVs, arterial line
    - Intra-op blood transfusion, TAP for post-op pain control
- Discharged on POD 20, **surgical oncology, psychotherapy follow-up**



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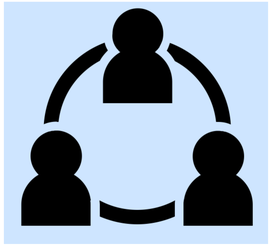
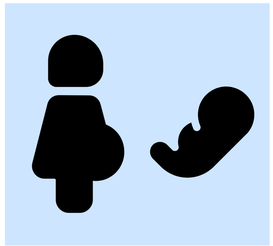
Teaching Points

Maternal-Fetal Conflict: Circumstances where maternal interests, health or decisions directly contradict fetal best interest

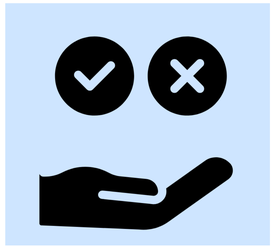
- Expectant management vs. delivery weighing maternal vs. fetal benefit / survival
- Continuation of the pregnancy carried significant risk to fetus and mother
- Given these risks, elected to proceed with termination



Collaborative multidisciplinary planning (ethics team)



Individualized management, delicate nature of maternal-fetal conflict



Core principles of autonomy, beneficence and nonmaleficence

HCAs carry a significant morbidity and mortality risk highlighting the importance of early identification, treatment, and specialist support.

1. Myers L, Ahn J. Clin Liver Dis. 2020, 2. Nocita MA, et al. Obstet Gynecol Surv. 2024, 3. Cobey FC, Salem RR. AM J Surg. 2004