

Hemorrhagic ovarian cyst

- Usually result from haemorrhage into a corpus luteum or other functional cyst.
- Radiographic features are variable depending on the age of the haemorrhage.
- Typically resolve within eight weeks.

Presentation

- Patients may present with sudden-onset pelvic pain, pelvic mass, or they may be asymptomatic and the HOC is an incidental finding ⁴.
- A hemorrhagic or a ruptured ovarian cyst is the most common cause of acute pelvic pain in an afebrile, premenopausal woman presenting to the emergency room ⁵.
- They can occur during pregnancy

US

- HOCs can have a variety of appearances depending on the stage of evolution of the blood products and clot.
- lace-like reticular echoes or an intracystic solid clot
 - a fluid-fluid level is possible.
- thin wall
 - clot may adhere to the cyst wall mimicking a nodule, but has no blood flow on Doppler imaging
 - retracting clot may have sharp or concave borders, mural nodularity does not
- posterior acoustic enhancement
 - may be less noticeable if [harmonics](#) or compounding is used
- there should not be any internal blood flow
 - circumferential blood flow in the cyst wall is typical
- If there is [rupture of a haemorrhagic cyst](#), other findings may be present.

Treatment and Prognosis

- Most hemorrhagic cysts resolve completely within two menstrual cycles (8 weeks).
- Cysts with a typical appearance of a hemorrhagic cyst should lead to follow-up ultrasound or MRI imaging in 6-12 weeks if:
 - the cyst is > 5 cm in diameter if the patient is pre-menopausal *or*
 - any size of a hemorrhagic cyst if the patient is perimenopausal ²
- In the postmenopausal patient, surgical evaluation is warranted.
- A cystic structure that does not convincingly satisfy the criteria for a benign cyst cannot be considered a cyst and should be evaluated with a short interval follow-up ultrasound or MRI

DDx:

● cystic ovarian neoplasm: the most helpful feature in distinguishing ovarian neoplasms from haemorrhagic cysts are

- papillary projections
- nodular septa
- colour Doppler flow in the cystic structure

● endometrioma

- typically contains uniform low-level internal echoes with a hypervascular wall on Doppler ultrasound.
- more often multiple
- on MRI, endometrioma shows high signal in T1 and low signal in T2 (shading sign), although there is overlap in appearance with haemorrhagic cysts