The incidental adnexal mass

Julia R. Fielding, M.D.
University of N. Carolina at Chapel Hill
Julia_fielding@med.unc.edu
2 sets of problems, 2 sets of patients

- Pre-menopausal patient
  - Cystic mass – almost always benign
  - Cystic/solid mass – usually benign

- Post menopausal patient
  - Cystic lesions – usually benign
  - Cystic/solid masses – almost always malignant
Proposed SRU guidelines for simple cysts identified on **US**

- Pre-menopausal woman
  - virtually all will have cysts
  - <5cm – do not follow
  - >5cm – repeat US in 6-12 weeks
Proposed SRU guidelines for simple cysts identified on **US**

- **Post-menopausal woman**
  - 3-15% of women will have cysts (likely inclusion cysts)
  - Likelihood of malignancy is 1%
  - <1 cm – do not follow
  - 1-7 cm – yearly US
  - >7 cm - consider surgical removal
But what about CT and MRI?
Normal anatomy – pre-menopausal

- Maximum size adnexa approximately 4cm
- Follicular cysts of various sizes (2-9mm)
- Ovaries located medial to iliac vessels
- Gonadal vein extends directly to ovary from above
- Round ligament extends from ovary anteriorly to inguinal canal
- Nearly all ovaries can be seen on CT/MRI
Normal anatomy – post-menopausal

• Ovaries usually 1cm in size, variable identification on CT, approximately 40% identified on MRI
• Consider previous removal or one or both with hysterectomy
• Round ligament may still be visible
Corpus luteum cyst

• Dominant follicle usually 2.0-2.5cm
• Following ovulation/secretory phase
• Corpus luteum has a thick, collapsing, enhancing wall on CT/MR, +/- blood products
• Failure to ovulate leads to a cyst which may approach 5cm in size
Polycystic ovarian disease

- Ovaries -1/3 small, 1/3 normal size, 1/3 enlarged (>4cm)
- Most important finding is increased central stroma
- Often in association with endometrial hyperplasia
- Always increased LH
UNKNOWN CASE

- ? ENDOMETRIOMA
- ?CHRONIC TORSION
- ?HEMORRHAGIC CYST
General guidelines

• Consider patient history – even if you don’t know it at the time – could this be a cancer?
• Identify the ovaries on every CT/MR – use ovarian vein and bowel contrast
• Young asymptomatic patient – simple appearing cyst <3cm – US not necessary (internal UNC review 350 patients/CT/path)
• Post menopausal asymptomatic patient – US referral
Thank you