Subtyping of liver adenoma’s

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Liver Adenoma can present in various ways

• Usually asymptomatic

• Sometimes symptomatic:
  • *Bleeding*
  • *Very seldom: malignant degeneration*

  Note: on Pathology DD HCC and Adenoma often difficult
  Note: Biopsy unreliable for DD adenoma/HCC

• Sometimes multiple; if > 4 : adenomatosis

• Often OAC dependent, so discontinuation of OAC

• If symptomatic and adenoma > 5 cm: excision

• Recent subtyping adenomas with immunohistochemistry
Adenomas (2)

- Subtyping
  1. 40-45% HNFα 1 inh
     - Fat (> 80%) adenomas
       Little/no chance bleeding/HCC
       B-Catenine –
     - Typical MRI: fat, modest enhancement
  2. Inflammatory adenoma (ex Teleangiectatic FNH)
     - Part of metabolic syndrome
     - Chance for bleeding
     - Little chance for HCC
     - Low % B-Catenine +
     - Typical MRI: T2 met ring (atol sign)
       intense and persistent enhancement
3. 10-15 % $B$-Catenine +
   - High chance for HCC
   - (if HCC: 40% + for $B$-Catenine)
   - MRI: not typical

4. Unclassified (non 1,2,3,)
   - Higher chance for HCC
   - MRI: not typical
Consequences of histochemical subtyping: no consensus yet

- In asymptomatic adenomen
  - *Biopsy for assessment B-Catenine?*
  - *B-Catenine +: resection?*

- MRI subtyping in 3 typen:
  a. *Alfa 1 inh: fat, little enhancement*
  b. *Inflammatory: T2 high and atol sign. Persistent enhancement?*
  c. *Non a, non b.*

- Clinical consequences of MRI appearance not yet clear
Atypical features adenoma and FNH

1- Dependent on experience

2- Scar more often in FNH, but sometimes in adenoma
   - Look for other features:
     - Lots of fat: adenoma
     - Minimal enhancement: adenoma
     - Atoll sign: adenoma
     - Cloud-like, broccoli-like strong enhancement: FNH

3- Use of liver-specific contrast for DD FNH vd non-FNH
   - EOB-GDTPA (Primovist)
   - BOPTA (Multihance)

4- When in doubt: biopsy (needs experienced pathologist)