

Rad-Path Case Presentation

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Case: 62 year old male

- History notable for hemochromatosis, diagnosed at age 50
 - Ferritin >10000 at that time, staging biopsy?
 - No mention of cirrhosis in history
- Surgical history includes splenectomy and urgent AAA repair following rupture 2 years ago
- Presented to transplant clinic for evaluation of liver transplant after 5cm liver lesion discovered on follow-up US screening of aorta and confirmed via MRI at outside facility
- Referred to clinic for focal and non-focal liver biopsy

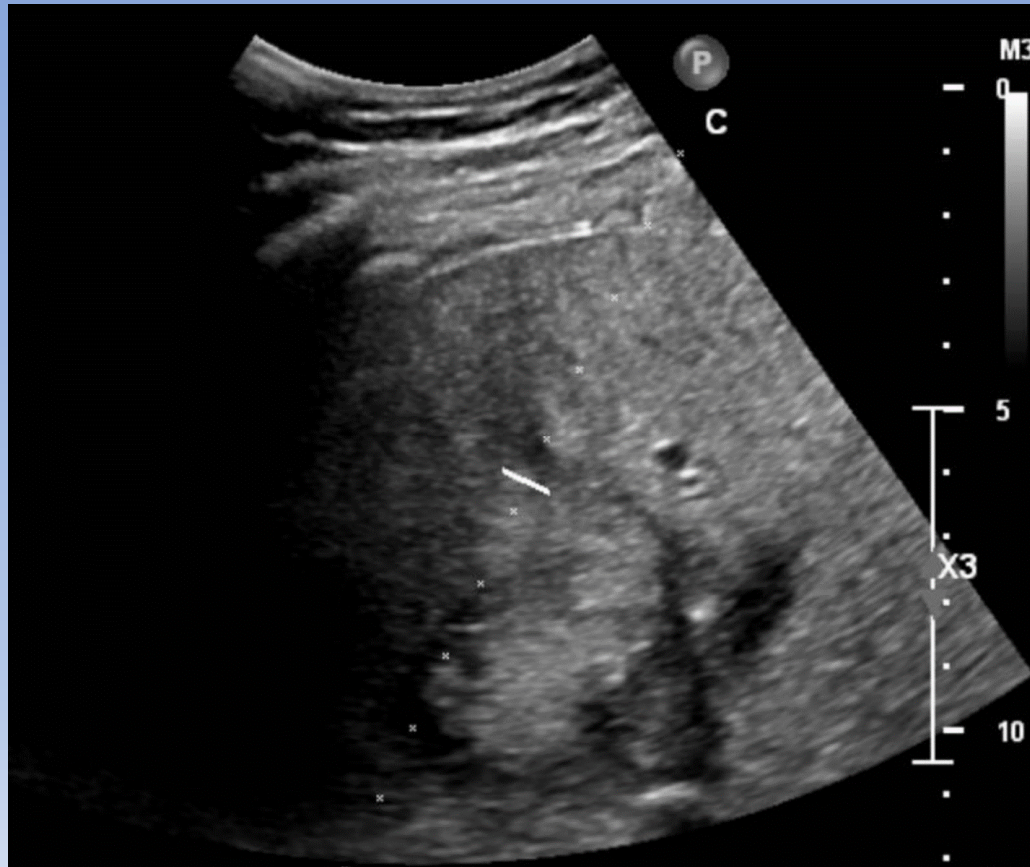
Liver mass redemonstrated on CTA



Biopsy approach

- Ultrasound chosen
 - Mass initially visualized on ultrasound, should not need CT to visualize
 - Safe and effective way to perform liver biopsy

Ultrasound guided focal liver biopsy

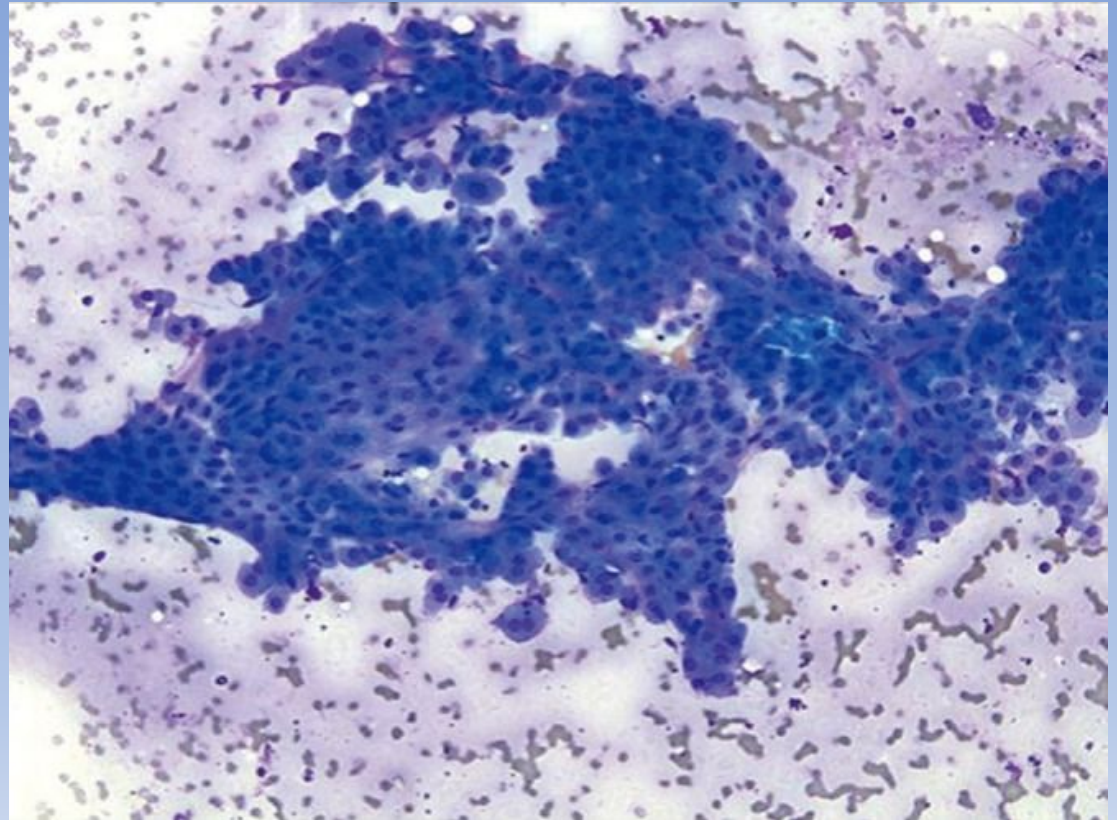


Samples collected and stains used

- FNA
 - Diff-Quick stain used to confirm correct sample location in real time
 - Pap stain performed later for greater nuclear detail visualization
- Core biopsy
 - H+E stain for examination of architecture of core biopsy

FNA, Diff-Quick stain

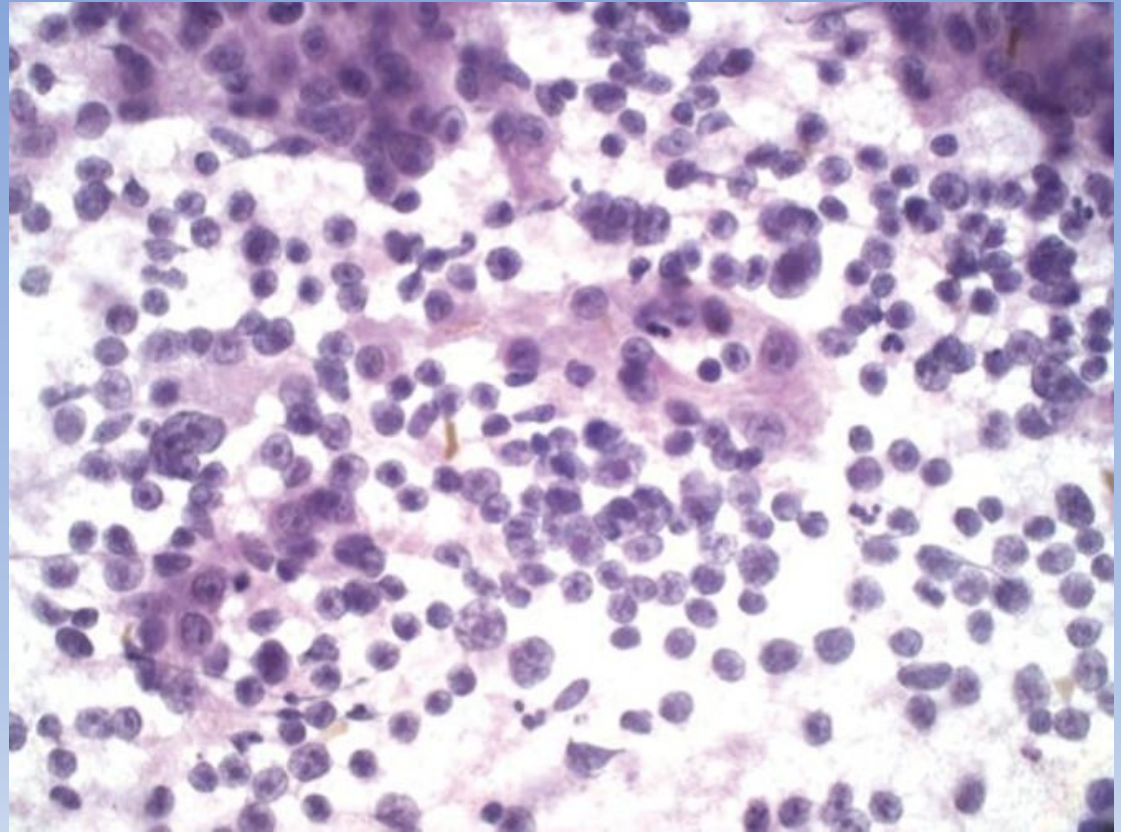
- Thick cords of cells
- Endothelial cells wrap around the groups of abnormal cells
- Large nuclei, nuclear variability
- Features of HCC



<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3562628/>

FNA, Pap stain

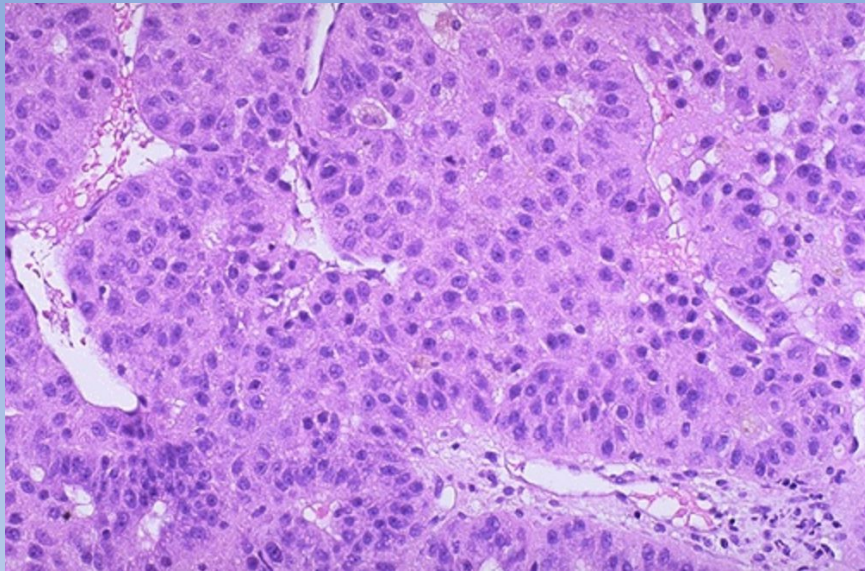
- Large nuclei with nucleoli visible
- Nuclear variability
- Features of HCC



<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3562628/>

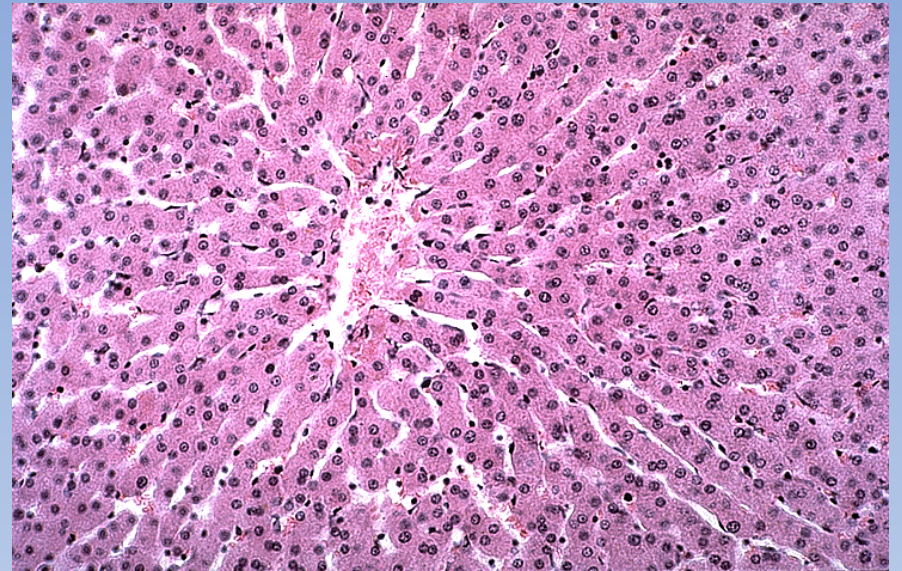
Core biopsy, H&E stain

HCC



<https://webpath.med.utah.edu/LIVEHTML/LIVER030.html>

Normal



<http://www1.udel.edu/biology/Wags/histopage/colorpage/clg/clglscv.GIF>

References

- Bacon, B. R., Adams, P. C., Kowdley, K. V., Powell, L. W., & Tavill, A. S. (2011). Diagnosis and management of hemochromatosis: 2011 Practice Guideline by the American Association for the Study of Liver Diseases. *Hepatology*, 54(1), 328–343. <https://doi.org/10.1002/hep.24330>
- Conrad, R., Castelino-Prabhu, S., Cobb, C., & Raza, A. (2013). Cytopathologic diagnosis of liver mass lesions. *Journal of Gastrointestinal Oncology*. Pioneer Bioscience Publishing. <https://doi.org/10.3978/j.issn.2078-6891.2012.020>
- <https://webpath.med.utah.edu/LIVEHTML/LIVER030.html>
- <http://www1.udel.edu/biology/Wags/histopage/colorpage/clg/clglscv.GIF>