

### Best Cases of the AIRP

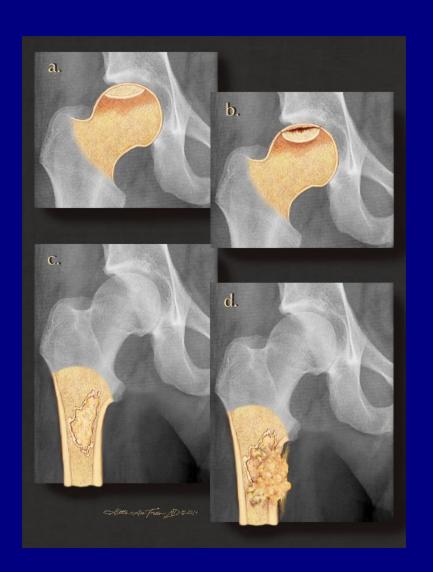
Sept-Oct, 2015



# Thank you to RSNA for sponsoring the pizza party to follow!!



### **Musculoskeletal Best Case**





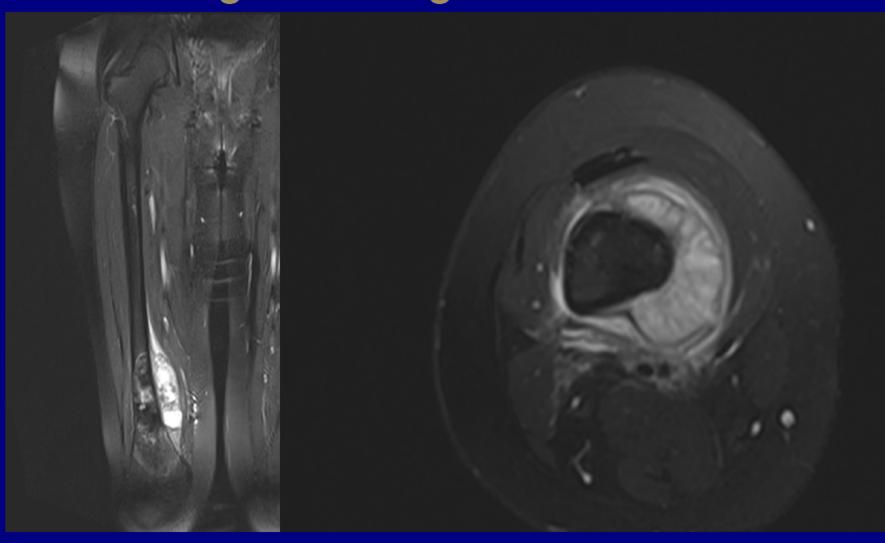
Femur radiographs





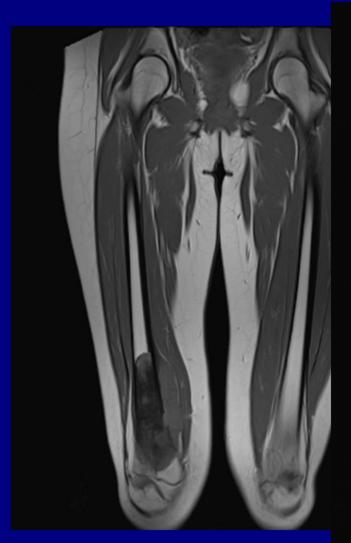


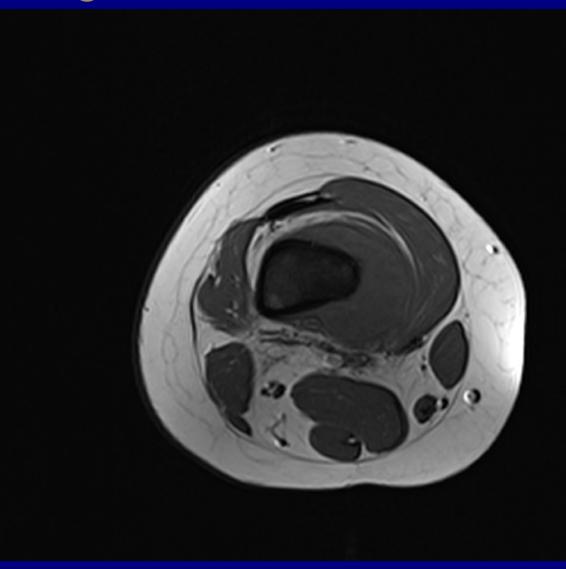
# MRI T2 weighted images





# MRI T1 weighted images





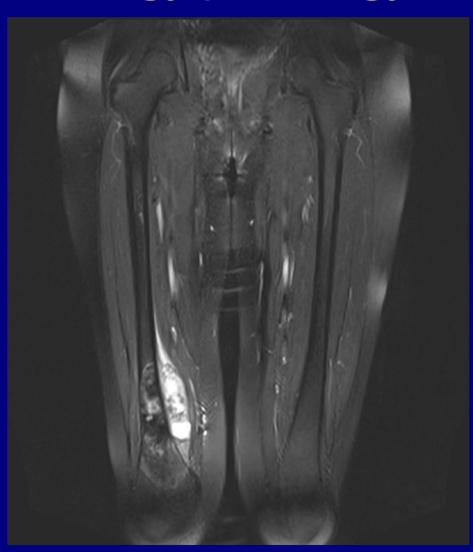


### Gross photograph





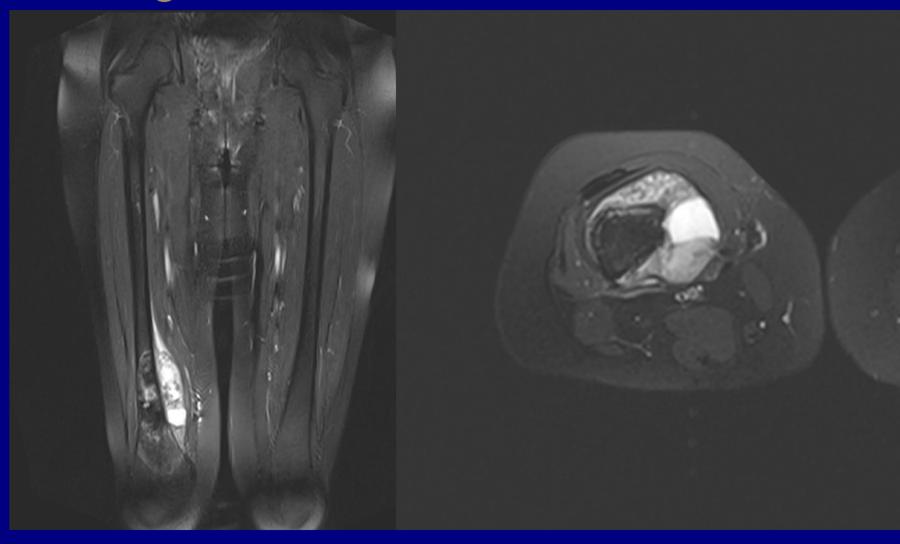
# Radiology pathology correlation





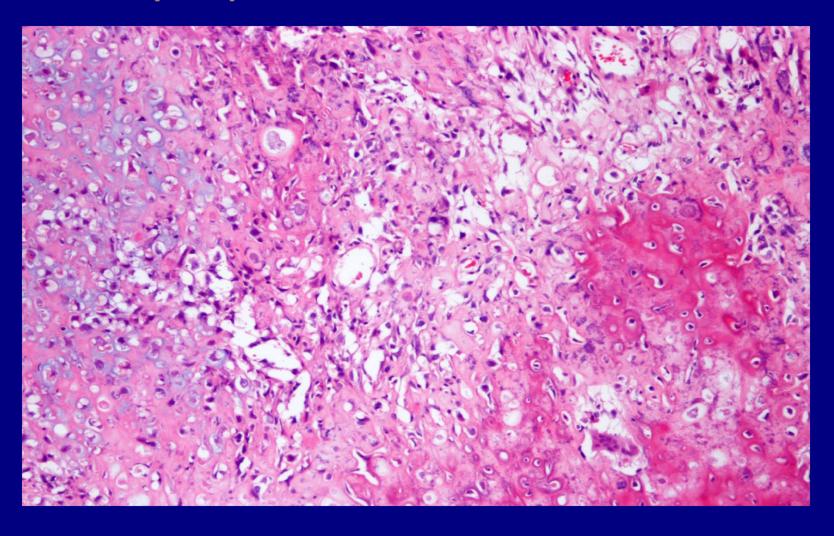


# MRI images



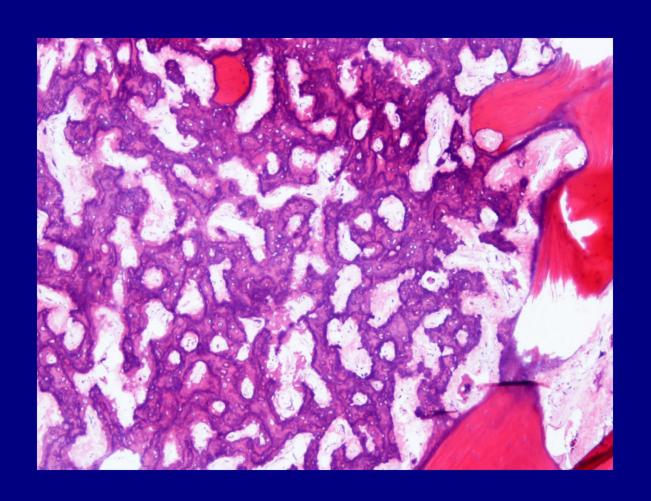


# Microscopic picture





### Microscopic picture post treatment





# Chondroblastic Osteosarcoma (AIRP # 9487)

Dr. Blake Jamieson
University of British Columbia
Vancouver, B.C., Canada



# Genitourinary Best Case





#### Clinical History

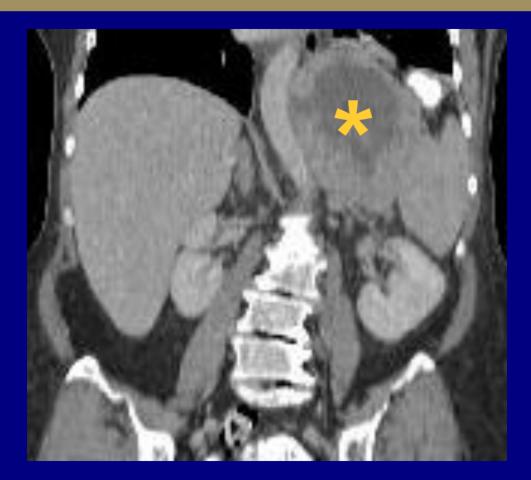
68 yo female with left flank pain























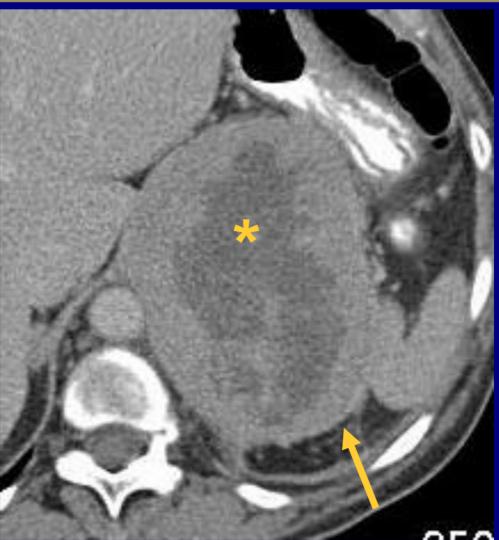


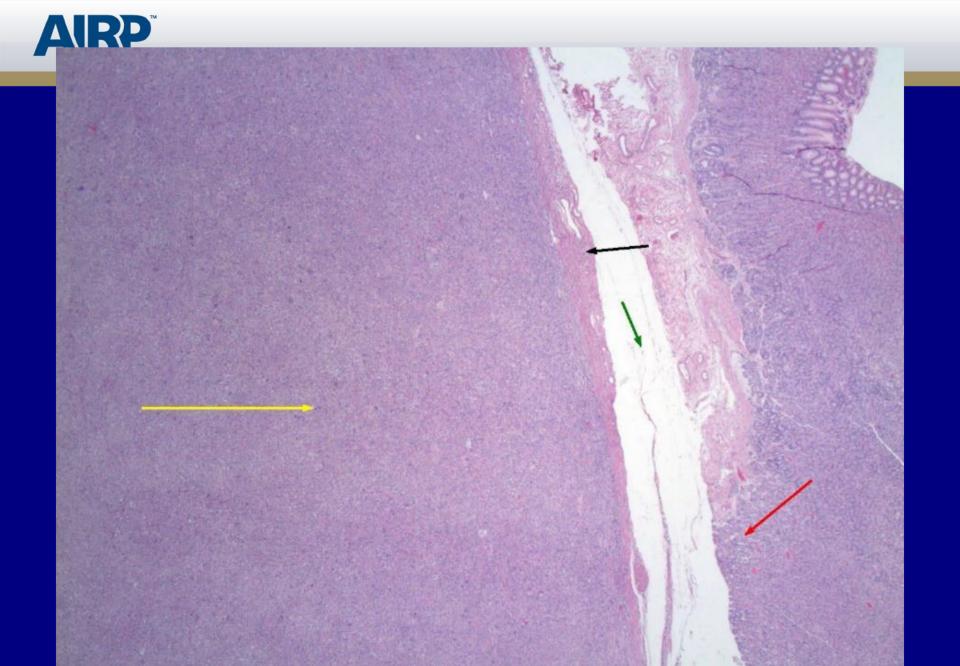














# Retroperitoneal Pleomorphic Sarcoma

Jason Teitelbaum, MD
Mt. Sinai-Beth Israel
New York, NY



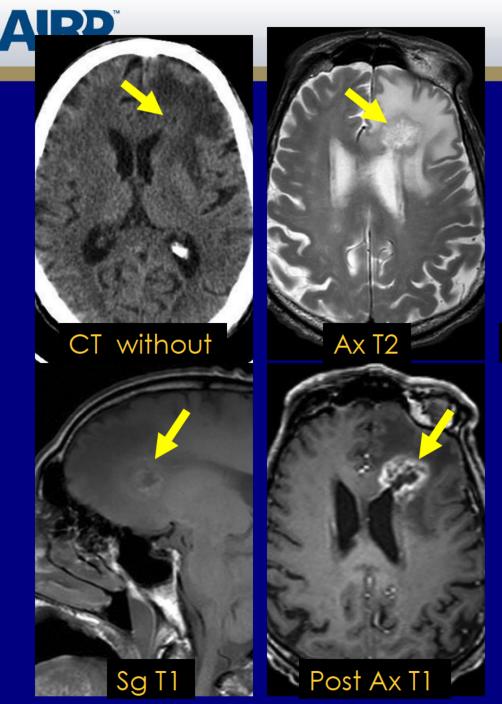
# Neuroradiology Best Case





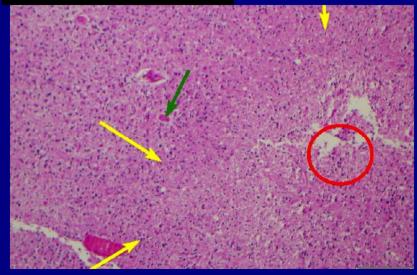
# History

79-year-old male with 1-month history of altered mental status, urinary incontinence, and unsteady gait





Coronal Section



Green arrow: endothelial proliferation; Yellow arrows; margin of pseudopalisading necrosis (center marked by red circle)

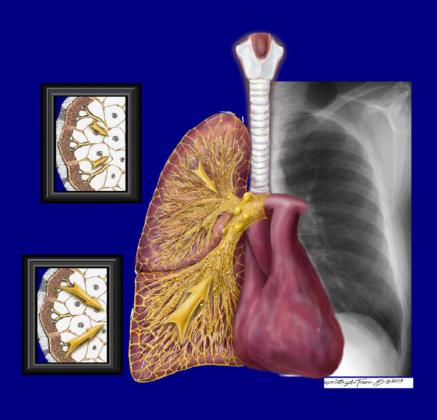


#### Glioblastoma multiforme

Matthew Prater, M.D. Vanderbilt University Nashville, Tennessee



# Pulmonary and Mediastinal Best Case





#### Clinical History

# 73 year old female with dyspnea and restrictive pulmonary functions



# PA radiograph





### Dual energy image

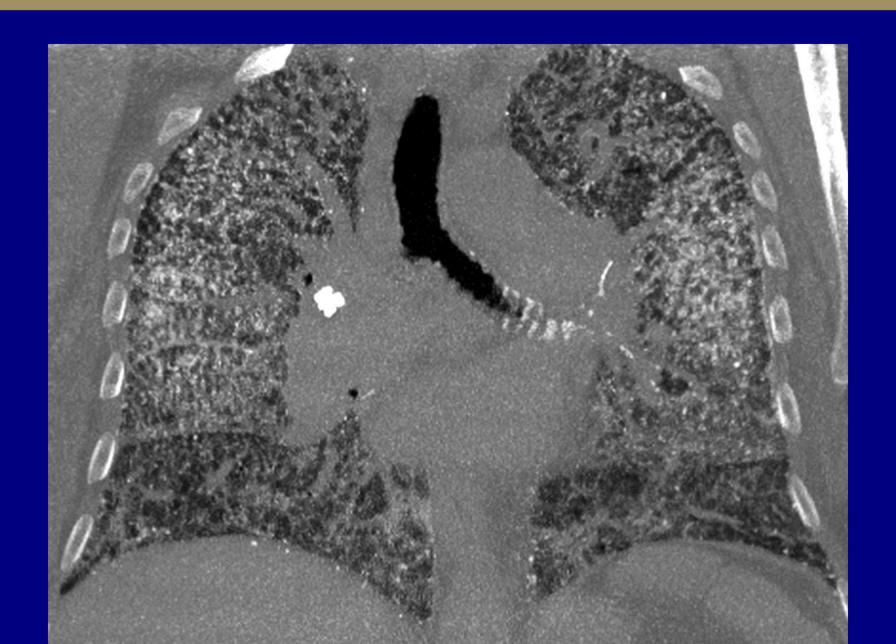




### Dual energy image



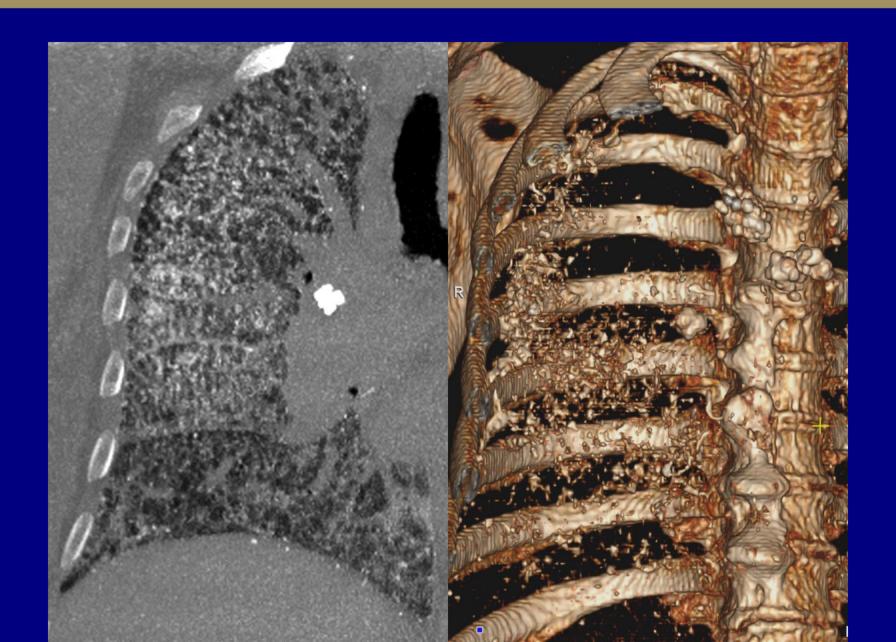




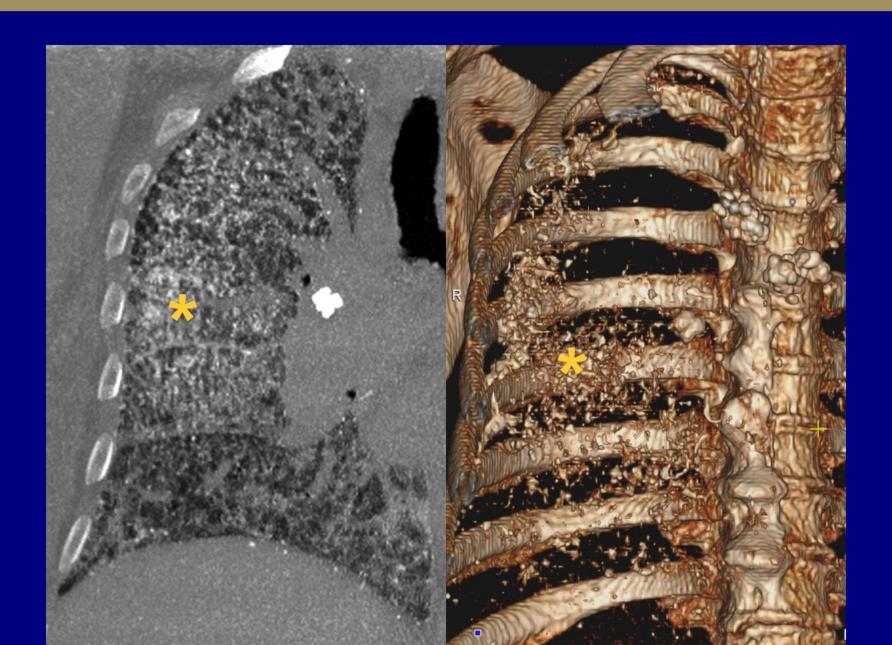










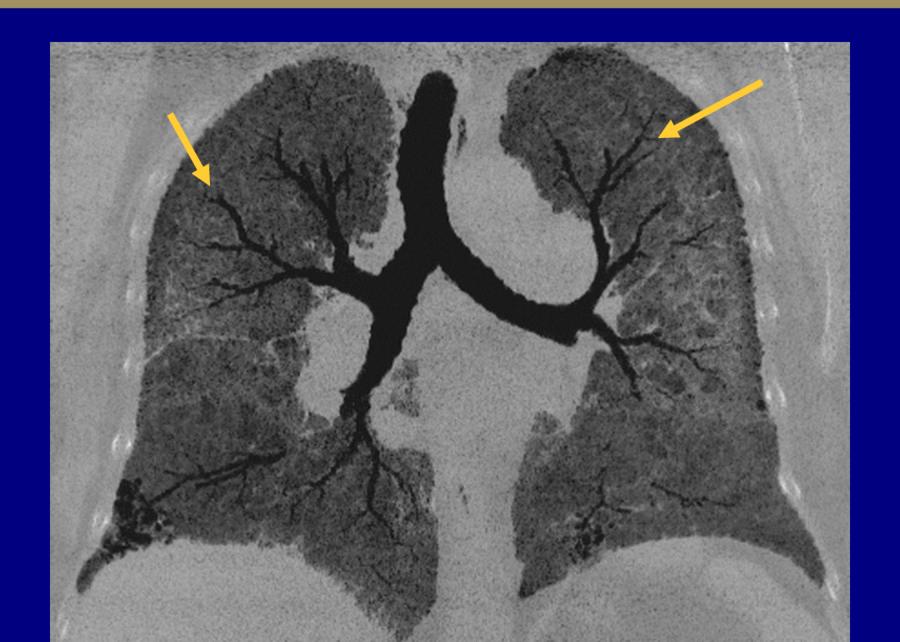


### ARP Traction bronchiectasis: fibrosis



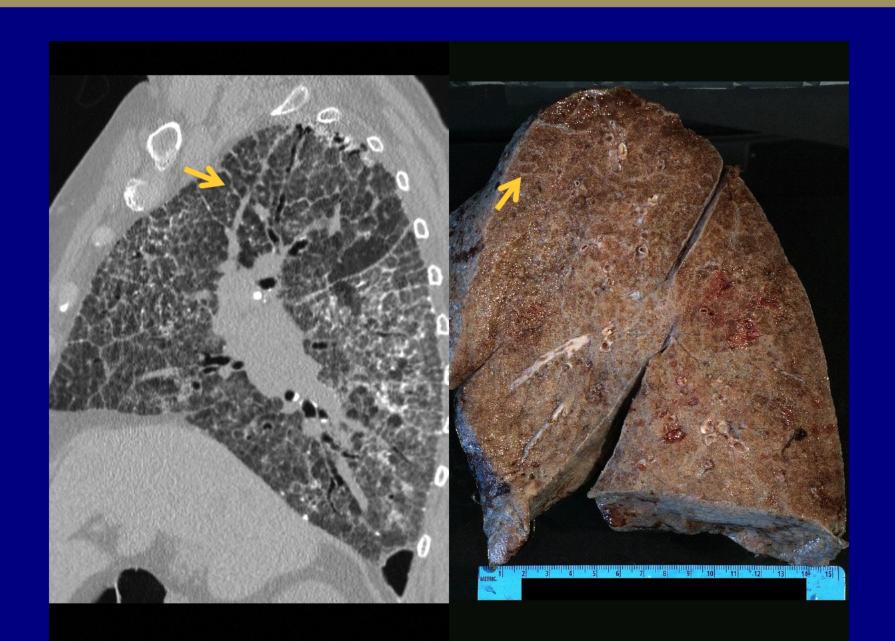


# AIRP Traction bronchiectasis: fibrosis



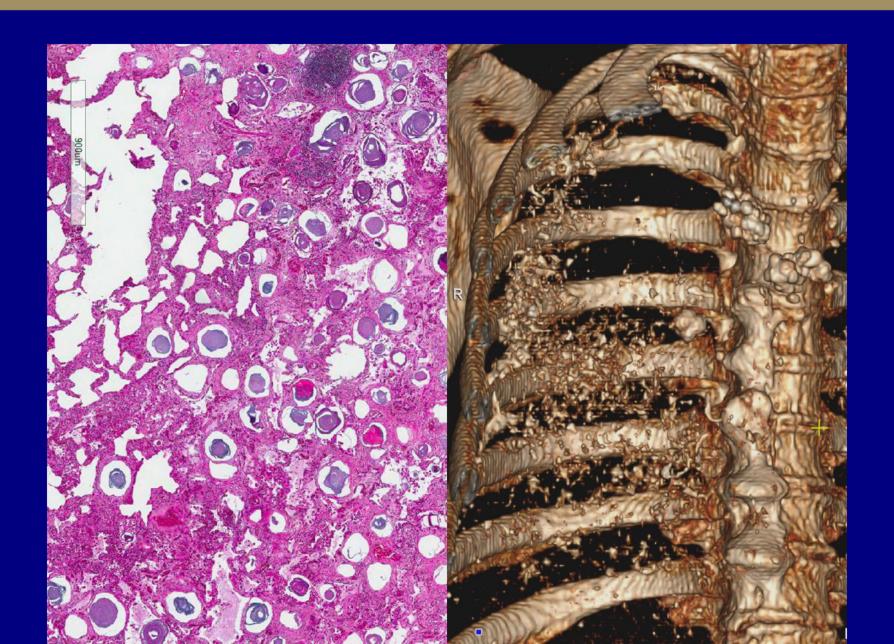


# Septal lines



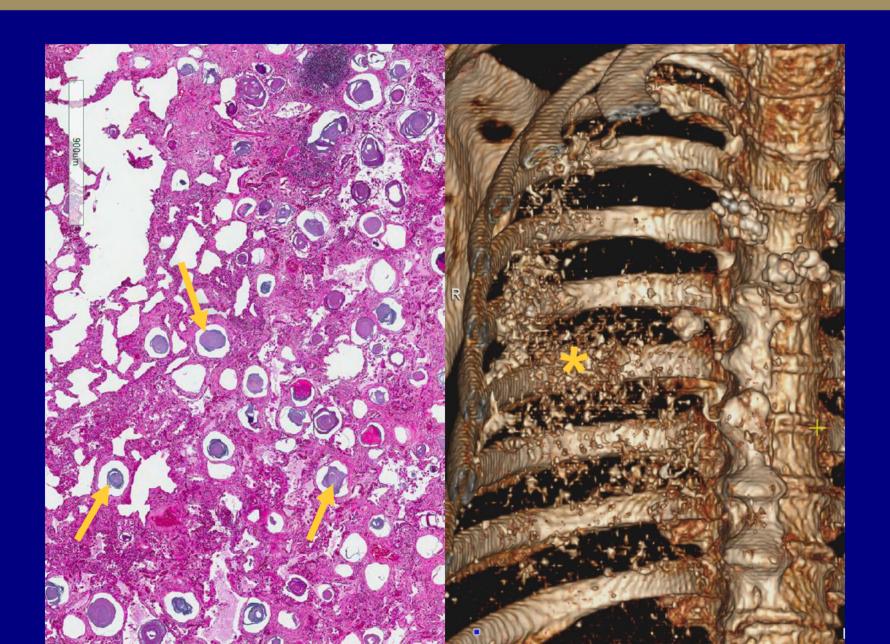


#### Airspace calcifications





# Airspace calcifications





#### **Alveolar Microlithiasis**

Joseph Delic, MD
University of Pittsburgh Medical Center
Pittsburgh, PA



#### Cardiovascular Best Case

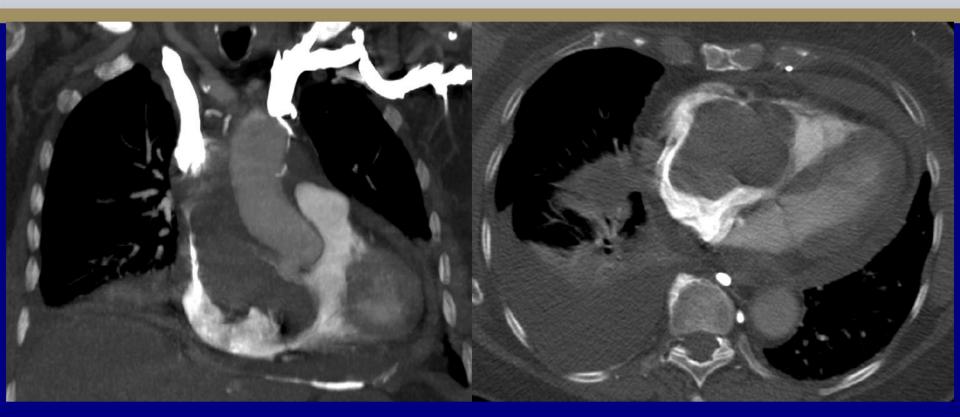




#### **Clinical History**

# 79 year old female presents to the ED with severe dyspnea

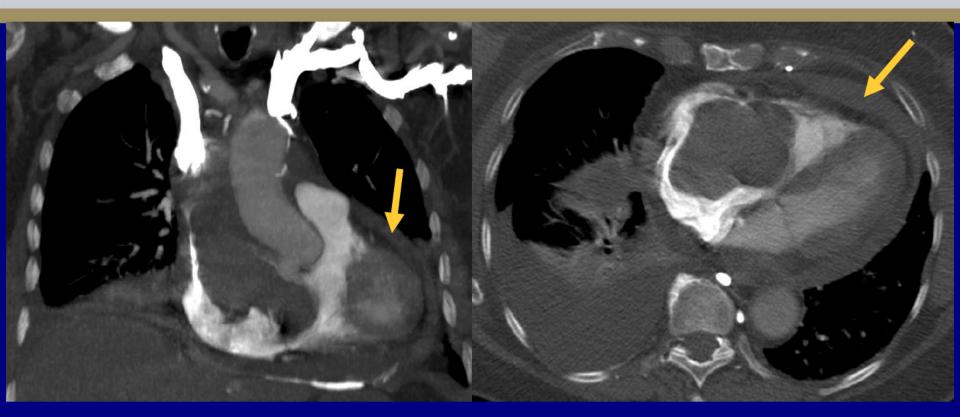






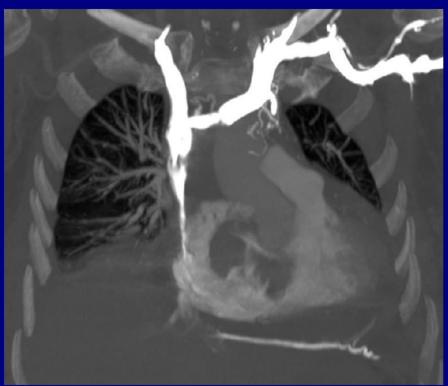








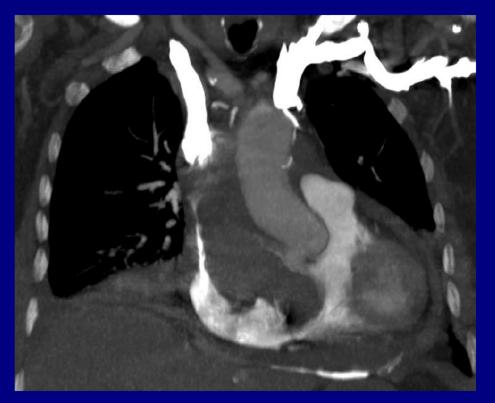




**Coronal CT** 

**Coronal MIP reformat** 





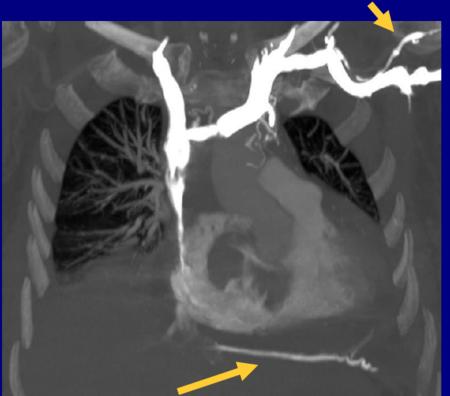


**Coronal CT** 

**Coronal MIP reformat** 



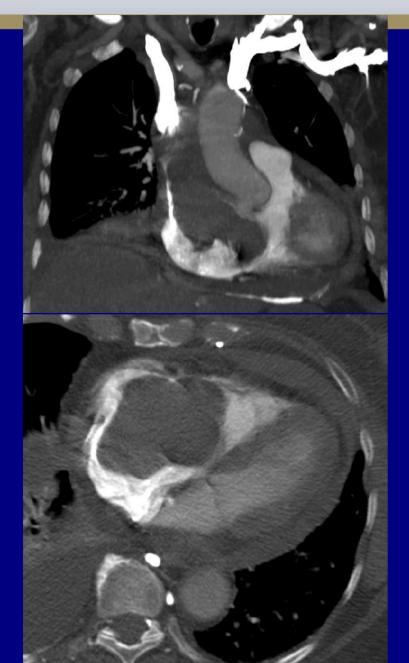




**Coronal CT** 

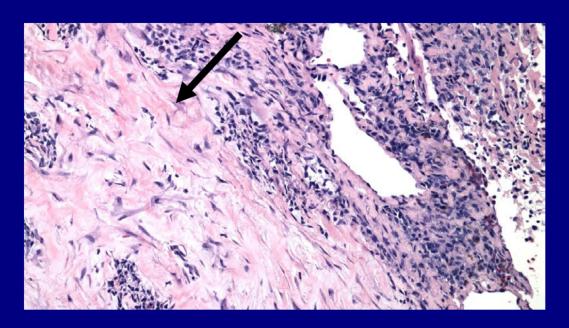
**Coronal MIP reformat** 

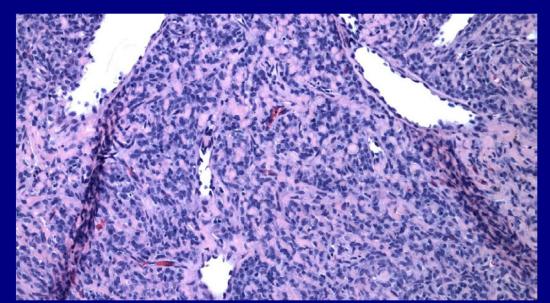














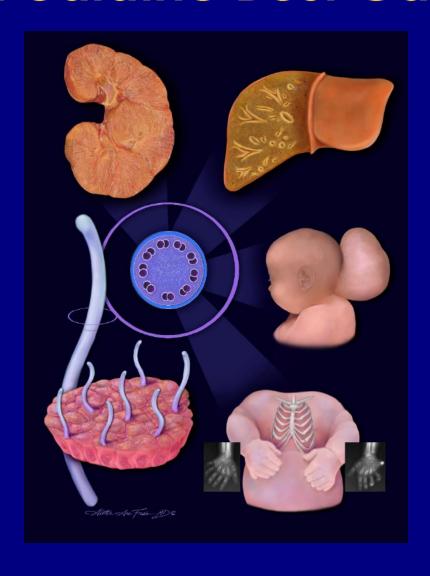


# Synovial Sarcoma of the Right Atrium

Ali Mian, MD
Yale University Medical System
New Haven, CT



# **Pediatric Best Case**

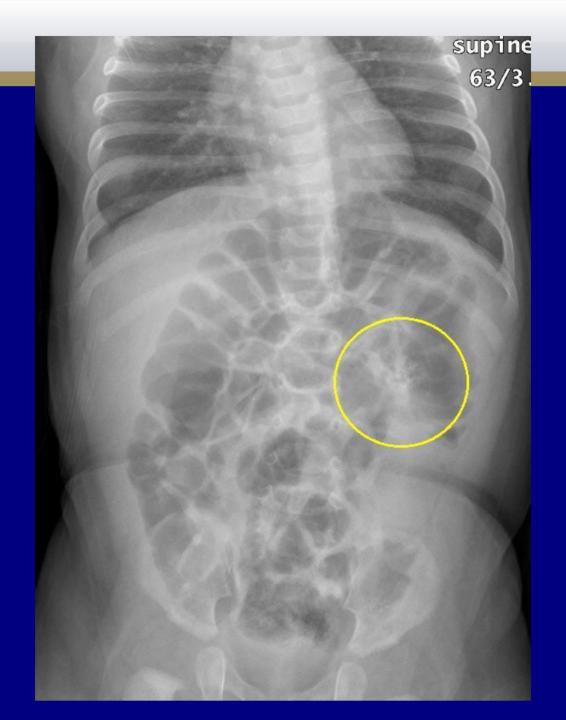




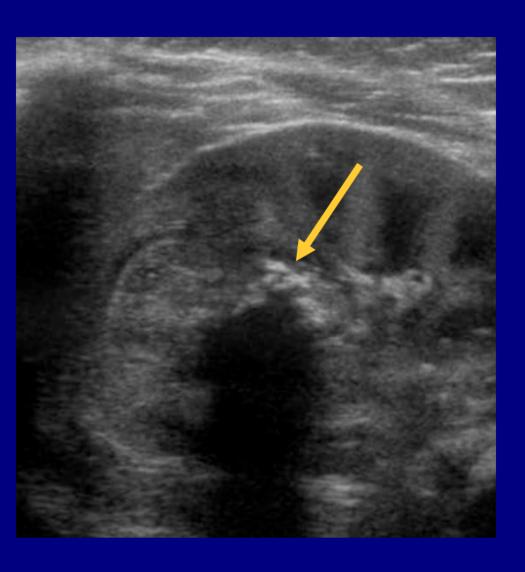
#### Clinical History

A 3 week old boy born at term by uncomplicated vaginal delivery presented with gross hematuria.

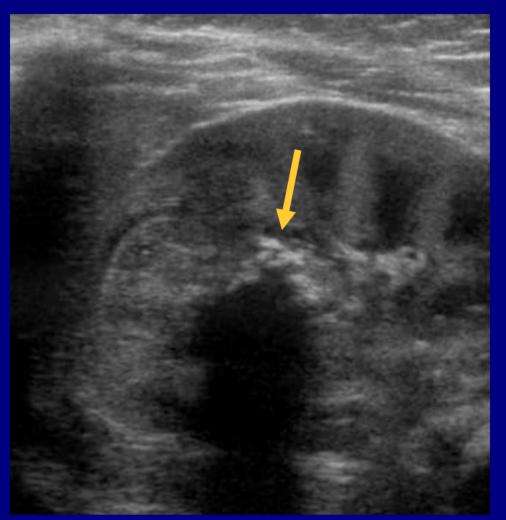








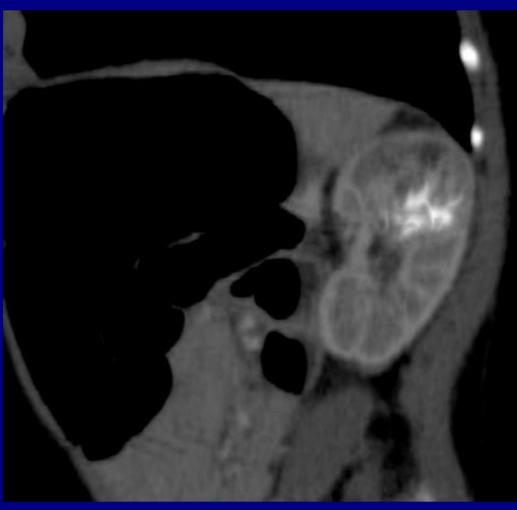






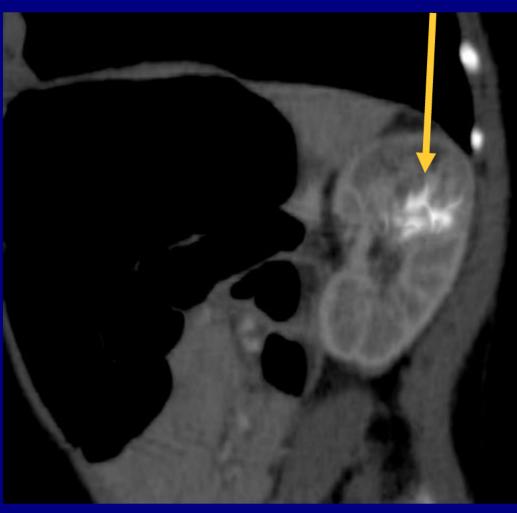












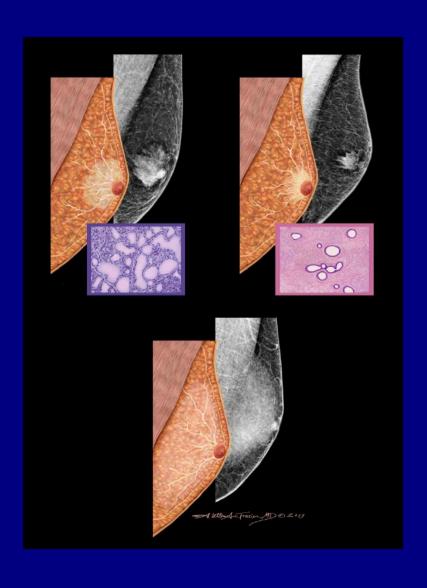


#### Ossifying Renal Tumor of Infancy

Jacques Trollip, MD
University of British Columbia
Vancouver, Canada



# **Breast Best Case**



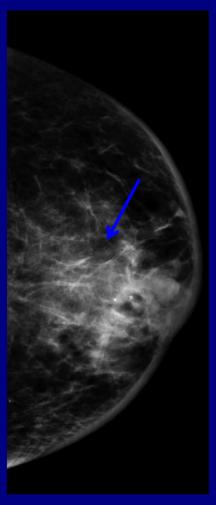


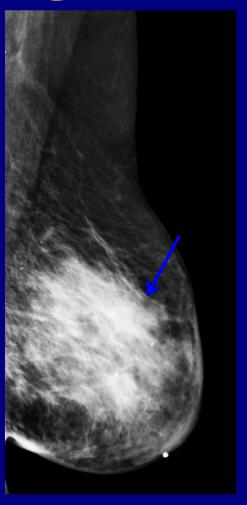
#### **Clinical Presentation**

- 77 year old female with increasing firmness and induration of the left breast
- Ipsilateral stage I invasive ductal carcinoma 15 years ago treated with lumpectomy and whole breast radiation. Negative margins and lymph nodes.
- Regular mammograms; last one year ago negative
- On physical exam, the left breast was entirely indurated with peau d'orange and ulceration adjacent to the nipple.



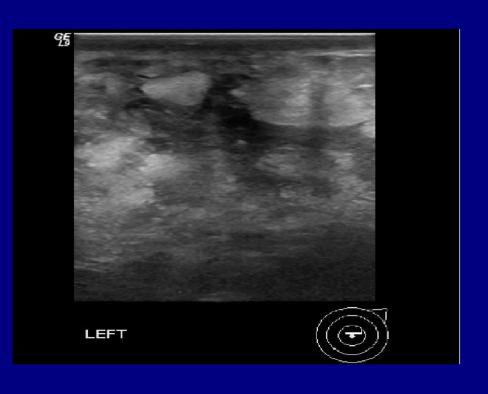
# Diagnostic Left Mammogram

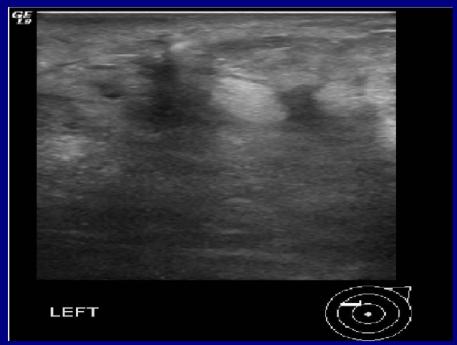




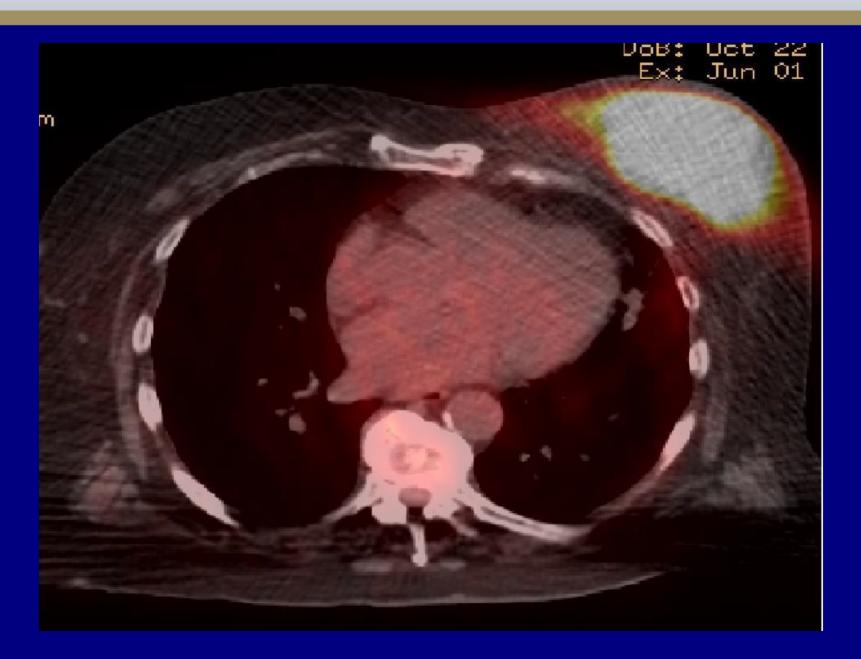


# **Diagnostic Ultrasound**





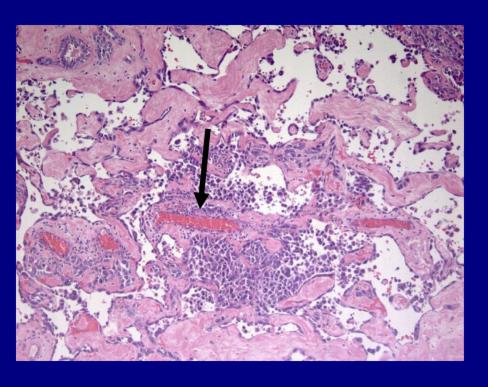


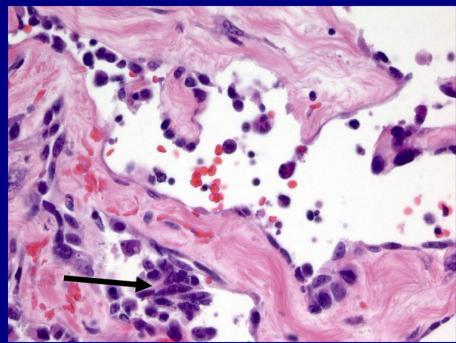














#### Secondary Angiosarcoma

- Older women who have undergone radiation treatment for prior breast cancer.
- Mean age 60 years
- Incidence of post-irradiation angiosarcoma is low (0.09-0.16%).
- Average time between radiation therapy and development of angiosarcoma is approximately 6 years, however it can been seen as early as 1 year and as late as 41 years.
- Usually presents as red nodules and skin discoloration which can easily be mistaken for bruising delaying diagnosis.



#### **Angiosarcoma**

Xhorlina Marko, MD Beaumont Hospital-Dearborn Dearborn, Michigan



#### Gastrointestinal Best Case



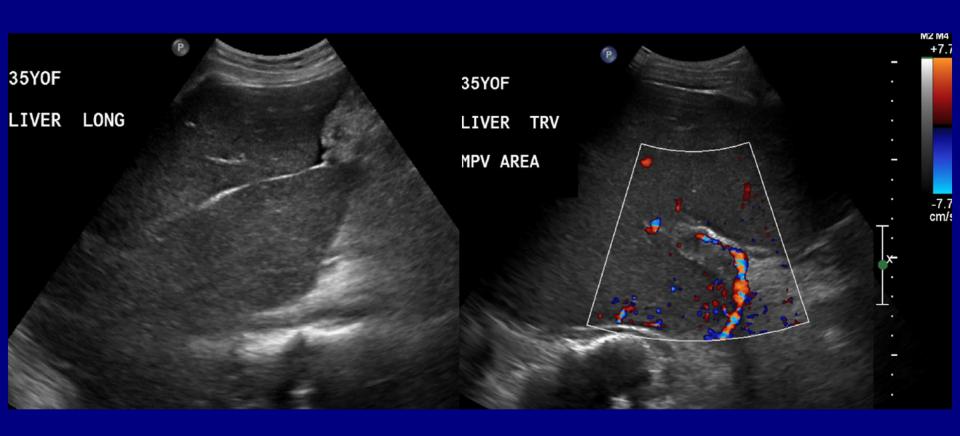


#### Clinical information

35 year old female with acute onset of rapidly progressive dyspnea and increasing abdominal distension.

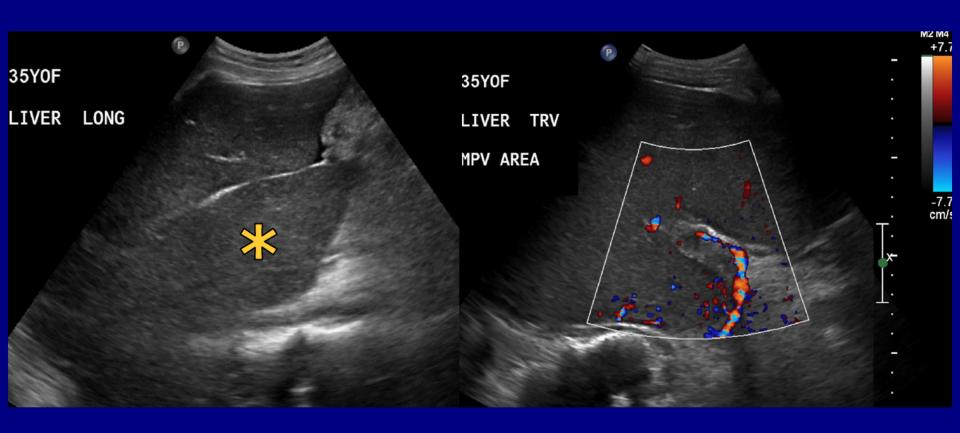


#### Ultrasound



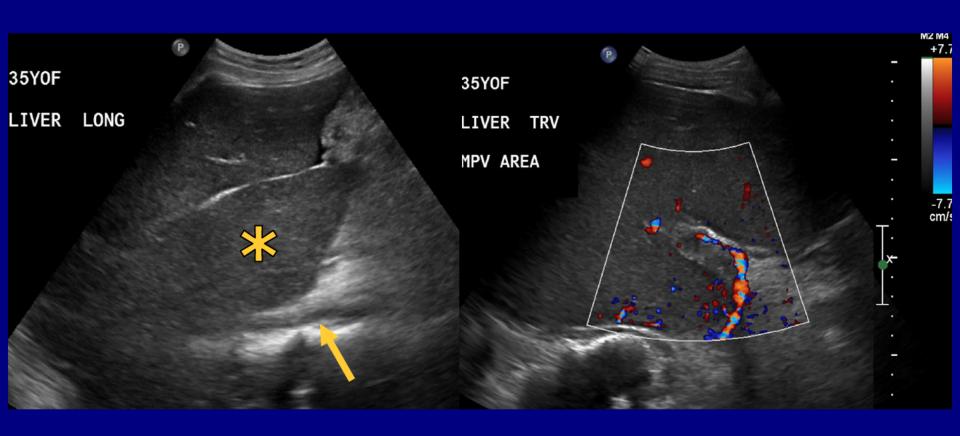


#### Ultrasound



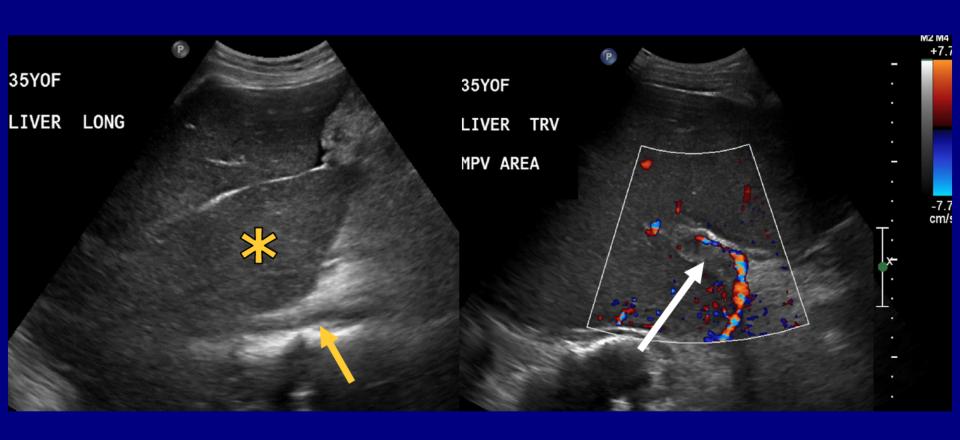


#### Ultrasound



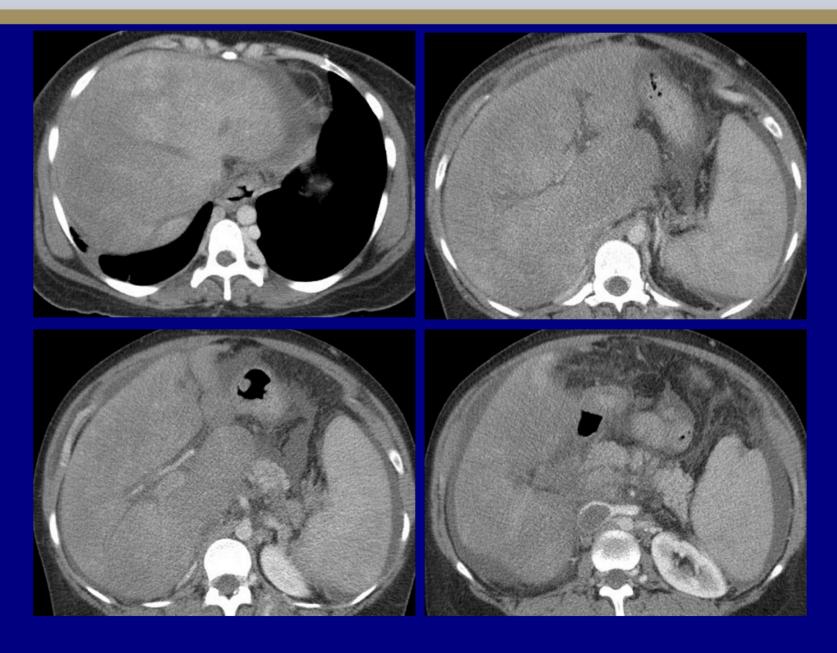


#### Ultrasound



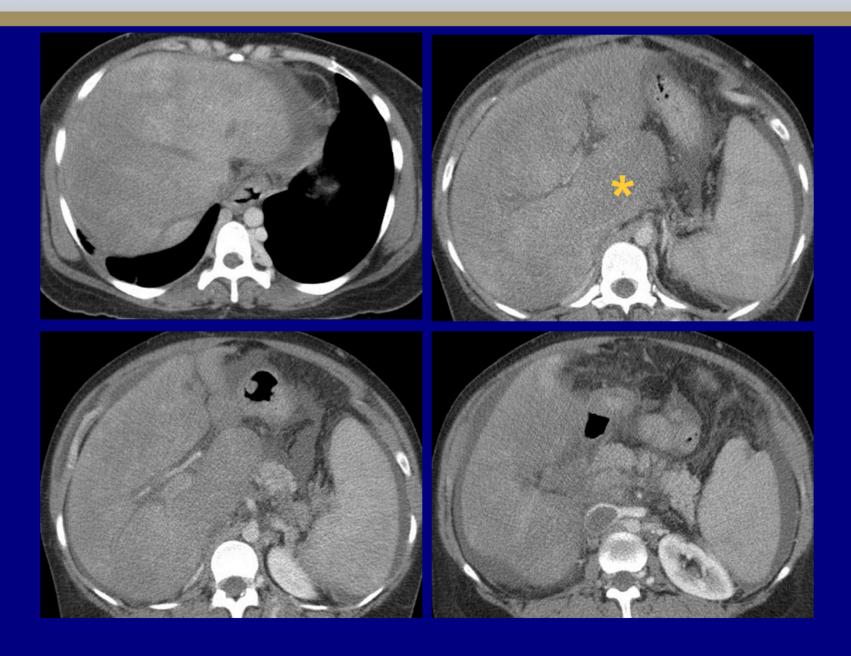






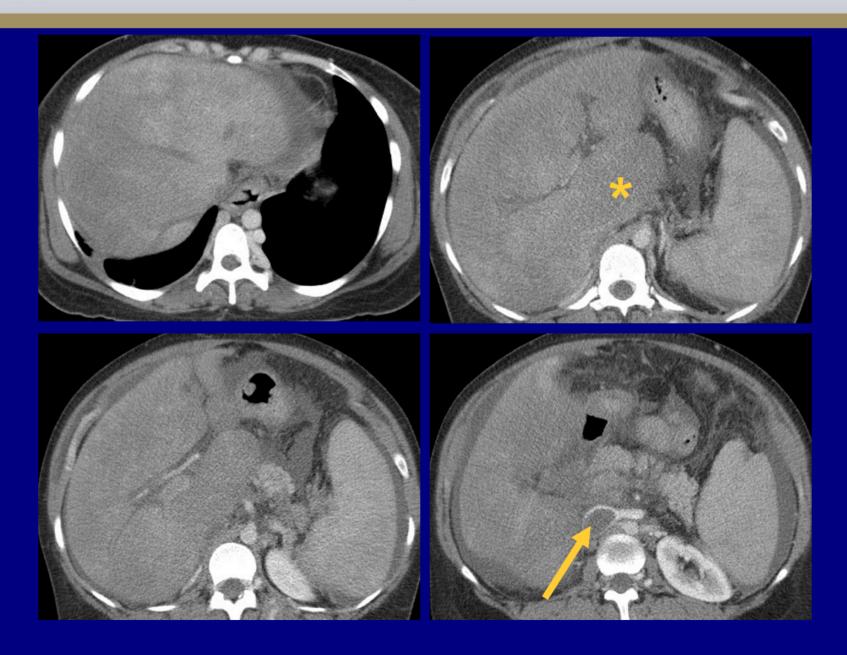


#### CT



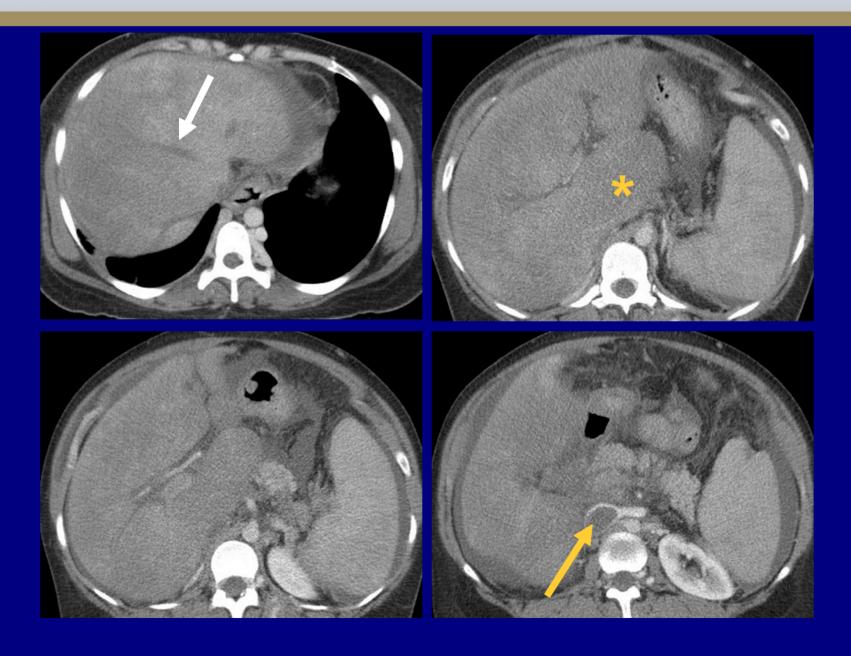


#### CT





#### CT







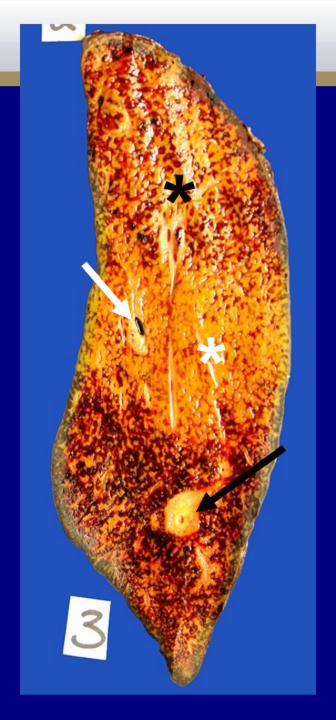






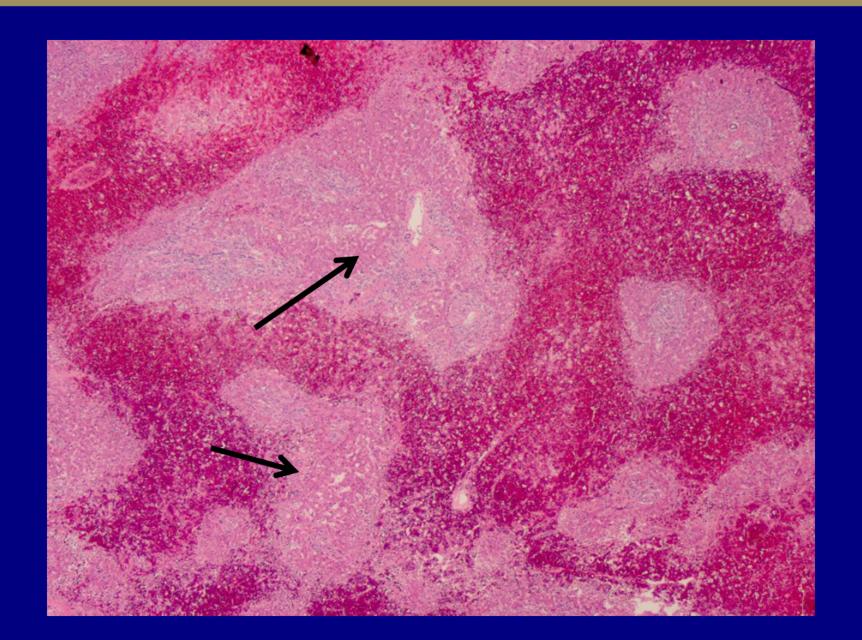






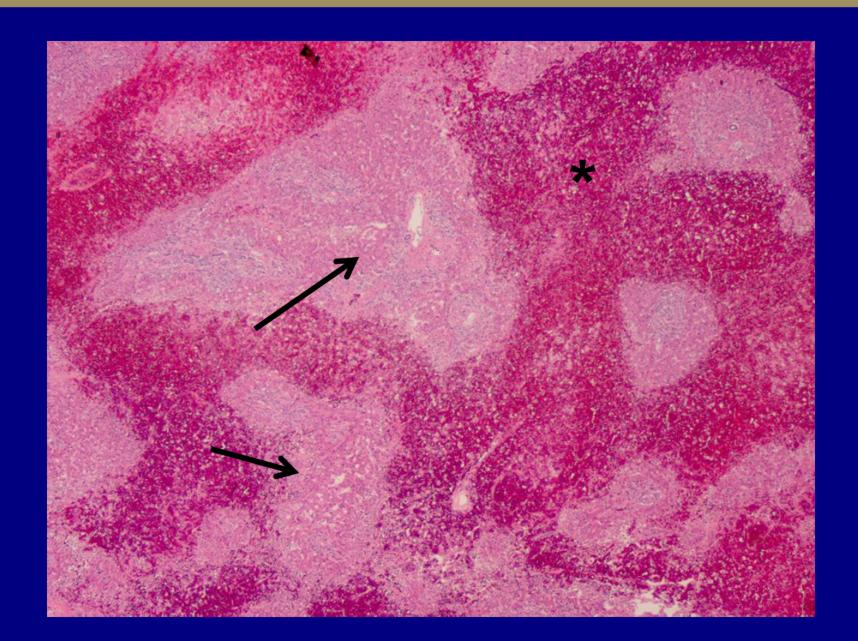


# Histology





# Histology

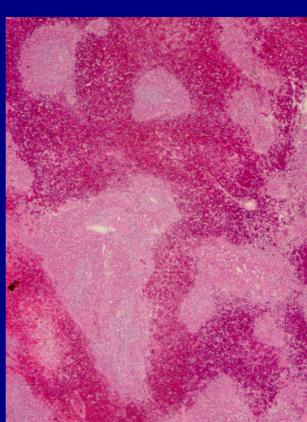




# Acute Budd-Chiari syndrome









#### **Acute Budd-Chiari Syndrome**

Keith Russell, M.D.
University of Mississippi Medical Center
Jackson, MS



# Many thanks to all of you for submitting such great cases! Have a safe trip home

From the staff of the American Institute for Radiologic Pathology