Best Cases of the AIRP

February-March, 2019
44 year old female complains of a lump in her posterior thigh she noticed 2 years ago; now it has grown and become more painful.
Frontal radiographs
Ultrasound with doppler
Ultrasound with doppler
Ultrasound with doppler
Axial T1 non FS

Axial T1 FS +C

Sagittal T1 non FS

Coronal STIR
Extrapleural solitary fibrous tumor, lipomatous variant

Dr. Peter Tang
Mount Sinai Hospital
New York, NY
HONORABLE MENTION
MSK
February – March 2019
5 year old female with no PMH presents with progressively enlarging painful lump on the right side of her head. Parents noticed this lump in the past 3 weeks.
Axial non-contrast CT

Coronal non-contrast CT
Axial T1 non FS

Axial FLAIR

Axial T1 +C

Axial STIR
Langerhans Cell Histiocytosis of bone

Dr. Timothy Phelps
Baylor University Medical Center
Dallas, TX
Gastrointestinal Best Case
Clinical information

49 year old female incidentally found at have a complex cystic lesion of the liver on ultrasound when she presented with symptoms of diffuse nonspecific abdominal pain and bloating.
Immunohistochemistry:

Epithelium (+) biliary origin
Stroma (-) ER, PR, inhibin = not MCN
Biliary adenofibroma complicated by cholangiocarcinoma

Shamir Rai
Vancouver General Hospital
Vancouver, BC
Neuroradiology Best Case
Clinical information

21-year-old female with progressive discomfort and swelling in left jaw region following tooth extraction 1 year earlier
Ameloblastoma

Michael Maggart, M.D.
Jackson Memorial Hospital
Miami, Florida
Pulmonary and Mediastinal
Best Case
Clinical information

48 year-old-male with right-sided chest pain and progressive dyspnea over 3 days. A right-sided pneumothorax was discovered.
Pneumothorax and mass
Lung mass with calcification
PET uptake similar to blood pool
Vascular channels
Hamatoma: cartilage, fat and respiratory epithelium
Hamartoma

Javier Cacho, MD

Clinica Alemana De Santiago
Universidad Del Desarrollo
Santiago, Chile
Cardiovascular Best Case
51 year old female with progressive dyspnea.

Chest CT angiography shows saddle pulmonary embolism.
CT also shows an elongated and partly enhancing intravascular soft tissue mass filling the IVC and left iliac vein (arrows).
MRI (T2 blade sequence) shows mixed signal intensity within the left common iliac vein filling defect (arrow), compatible with internal vascularity. This feature argues against bland thrombus.
OPERATING ROOM PHOTOGRAPHY:
Elongated IVC intravascular tumor resected, only partly adherent to luminal wall.
Photomicroscopy (LEFT) shows partly adherent intravascular tumor (arrows) and smooth muscle cell proliferation (oval).

Immunohistochemistry (RIGHT) shows tumor cells stain positive for desmin (B) and actin (C).
IVC leiomyomatosis, with fragments filling the pulmonary arteries

Alexandra Murphy, MD
The Mater Misericordiae University Hospital
Dublin, Ireland
Pediatric Best Case
Clinical information

14-year-old male with no significant past medical history presented with 2 month history of abdominal pain, nausea, headaches and fatigue. He has had a 7 pound weight loss over the last month.
Succinate Dehydrogenase Deficient Renal Cell Carcinoma

Atul Kumar
University of Connecticut
Hartford, CT
Breast Best Case
45-year-old female presented for routine mammogram for breast cancer screening
Mammogram and US
Granulomatosis with Polyangiitis (GPA)(“Wegeners”)

Daniel Lee
Pennsylvania Hospital
Philadelphia, Pennsylvania
Clinical Information

31 year old with multiple prior cesarean sections presents with vaginal bleeding during the 2nd trimester of her current pregnancy.
Internal Cervical os
Placenta Percreta

Steffen Haider, MD
New York-Presbyterian-Columbia
New York, NY