Best Cases of the AIRP

January 27 – February 21, 2014
Musculoskeletal Best Case
29-year-old right hand dominant man presented with a hypothenar mass in the left hand. Patient first noticed the lesion at age three.
MRI Distal Forearm

T1

T2
MRI Wrist

T1

T2
MRI Metacarpal level

T1

T2
MRI Digits

T1

T2
MRI enhancement

Proximal

Distal
MRI Cor & Sag

T1

T2
GROSS
HISTOLOGY
Low & High Power
HISTOLOGY
Low & High Power
HISTOLOGY
Low & High Power
Lipomatosis of Nerve

Stephanie Chang, MD
Stanford University Medical Center
Stanford, California
Neuroradiology Best Case
31-year-old man with progressive weakness in right upper and lower extremities for one year
Hemangioblastoma

Ramesh Chokka, MBBS
The Alfred Hospital
Melbourne, Australia
Genitourinary Best Case
58-year-old man with incidental left renal mass
Tubulocystic Renal Cell Carcinoma

Joy Liau, MD
University of California San Diego
San Diego, California
PULMONARY AND MEDIASTINAL IMAGING
26-year-old man with shortness of breath and anxiety who presented to the ED
Numerous “tree-in-bud” nodules
Right heart strain
Numerous “tree-in-bud” nodules
Nodules – particles in small vessels
Embolized Crospovidone to the Lung (secondary to IV drug abuse)

Jonathan Lee, MD
MetroHealth Medical Center
Cleveland, Ohio
Cardiovascular Imaging
65-year-old woman with hypertension and dyspnea, slowly progressive over one year. 

Patient died within 6 months of clinical presentation.
ECG-gated contrast-enhanced CT shows a large left atrial mass containing calcifications and obstructing left inferior pulmonary vein.
Tc-99 MDP bone scan SPECT fused with axial CT reveals uptake in mass compatible with osteoblastic activity.
T1-post contrast MR image reveals avid enhancement within the mass.

4-chamber SSFP cine MR sequence shows obstruction of left ventricular inflow.
Post-mortem specimen and companion radiograph show calcified matrix throughout the left atrial mass, largely intramural in location.
Low power photomicrograph (H&E stain) demonstrates atypical spindle cells encased in osteoid matrix within left atrial wall, near insertion of left inferior pulmonary vein.
Primary Osteosarcoma of the Left Atrium

Christopher Trimble, MD
University of Maryland Medical Center
Baltimore, Maryland
Pediatric Best Case
11-year-old girl found to have hepatomegaly incidentally on routine well-child check-up
Calcifying Nested Stromal-Epithelial Tumor of the Liver

Mohammed Al-Natour, MD
University of Toledo Medical Center
Toledo, Ohio
Breast Best Case
45-year-old African-American man noticed a lump in his right breast for approximately 6 months. It was occasionally sore and upon squeezing it, there was purulent discharge from his nipple. Patient reports no other pertinent medical or family history.
Diagnostic Right Mammogram
Intracystic Papillary Carcinoma in a Male Patient

Scott Embry, MD
University of Tennessee Medical Center
Knoxville, Tennessee
Gastrointestinal Best Case
31-year-old man with sudden onset of acute left upper quadrant pain
Normal pancreas

Thin septa with endothelial lining
Lymphatic Malformation

Andrew Gore, MD
University of Miami
Miami, Florida
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