Best Cases of the AIRP

March-April, 2019
Gastrointestinal Best Case
Clinical information

36 year old woman with progressively worsening right upper quadrant abdominal pain.
Neuroradiology Best Case
Clinical information

55-year-old man with 2 days of headaches and arm paresthesias and 25 weight loss in prior 2 months. Slight left leg weakness and decreased sensation in C6 distribution.
Diffuse leptomeningeal melanomatosis

Yuh-Shin Chang, M.D.
Sacré-Cœur Hospital / University of Calgary
Montreal, Quebec, Canada
Pulmonary and Mediastinal Best Case
Clinical information

64-year-old man with progressive shortness of breath. He worked in the coal mines for 35 years and retired 3 years ago. He did not smoke cigarettes.
Bilateral hilar masses
Central necrosis
Central necrosis
Decreased perfusion
Numerous parenchymal nodules
Numerous parenchymal nodules: central fibrosis
Higher magnification reveals carbon pigment
Polarization reveals carbon silica particles
Mixed Dust Pneumoconiosis

Jessica Zhang
UPMC Presbyterian
Pittsburgh, PA
Cardiovascular Best Case
Clinical information

50-year-old female presents after two syncopal episodes which followed several weeks of “chest heaviness”.

[Image of logo: AIRP™ AMERICAN INSTITUTE FOR RADILOGIC PATHOLOGY]
- Enhancing thrombus, right iliac vein & IVC
- Left gonadal vein thrombus
- Bilateral ovarian & adnexal solid masses
Filling defect in IVC extends into right atrium
- Excised right atrial mass contiguous with intravascular IVC, bilateral iliac vein, & gonadal vein masses

- Excised bilateral ovarian & adnexal masses
- Excised right atrial mass contiguous with intravascular IVC, bilateral iliac vein, & gonadal vein masses

- Excised bilateral ovarian & adnexal masses
Intravascular soft tissue (*) is comprised of bland, benign spindle cell proliferation.

A vascular space containing a bland spindle cell proliferation is outlined in red.

For comparison, an adjacent normal vessel is outlined in blue.
- Intravascular soft tissue (*) is comprised of bland, benign spindle cell proliferation.

Higher power image reveals a benign smooth muscle proliferation within the vascular space lined by endothelial cells (red arrows). Compare to endothelial cells in adjacent artery (blue arrow).
Immunohistochemical stains show tumor is surrounded by endothelial cells (CD34 +)

Immunohistochemical stain for CD34 confirms endothelial lining around smooth muscle (red arrow). Compare to endothelial cells lining adjacent artery (blue arrow). There are also vessels within the tumor (green circle).
Uterine leiomyomas in association with intravenous leiomyomatosis

Dr. Teresa Martin-Carreras
University of Pennsylvania
Philadelphia, PA
Pediatric Best Case
Clinical information

4 year old caucasian boy with dyspnea, chest pain, abdominal pain and weight loss. On physical examination he was afebrile, tachypnic and had mild basilar crackles on the left. Blood tests showed slightly elevated inflammatory markers.
Epithelioid Hemangioendothelioma of the lung and pleura

Stefan Markart
Kantonsspital St. Gallen
St. Gallen, Switzerland
Genitourinary Best Case
Clinical Information

24 year old male with a palpable right testicular lesion.
Testicular Pure Teratoma

Muhammed Hatem
Rockyview General Hospital
Calgary, Alberta, Canada
Musculoskeletal Best Case
Clinical information

Healthy 33 year old Chinese male with no significant PMH presented with 1 month history of gradual onset, aching knee pain. He complained that pain worsened with weight bearing and climbing stairs. He had no pain at rest or at night. He felt no mass or lump.
Intramedullary Osteosarcoma

Dr. Loon Ying Tan
National University Hospital
Singapore
MSK
Best Case Runner Up
March – April 2019
Clinical information

69 year old Caucasian male with a history of progressive pain in his right hip for several months.
Chondrosarcoma

Dr. Sohrab Nazertehrani
Albany Medical Center
Albany, New York