Best Cases of the AIRP

Oct-Nov 2017
47 year old female with history of destructive lesion of femur
LOW-GRADE INTRAMEDULLARY OSTEOSARCOMA WITH FOCI OF DEDIFFERENTIATION

Dr. Narendra Gutta
University of Arkansas for Medical Sciences
Little Rock, AR
Honorable mention
51-year-old woman with pain in her left thigh for several months
INTRAMEDULLARY CHONDROSARCOMA

Dr. Elena López Banet
Hospital Clínico Universitario Virgen de la Arrixaca
Murcia, Spain
Gastrointestinal Best Case
Clinical information

52 year old male presented to the ED with progressive vague abdominal pain, without fever, diarrhea, constipation or change in weight or appetite.
Immunohistochemistry:
(+) Desmin, smooth muscle actin
(-) C-KIT, DOG1, S100, B-catenin
Leiomyosarcoma of the small bowel

Sowmya Mahalingam, M.D.
Yale New Haven Hospital
New Haven, CT
History

29-year-old female with type I diabetes and several months of nausea, vomiting, and decreased oral intake. Treated for diabetic gastroparesis. Persistent symptoms warranted neurologic evaluation.
Thin veil outer wall
Yellowish fluid underneath
Multilayered in deep tissue
Cholesterol crystal clefts
Sheet of keratin
Ducts / glandular tissue
Calcification
Dermoid

Kristen Launier, M.D.
Harbor UCLA Medical Center
Torrance, CA
Pulmonary and Mediastinal
Best Case
53 year old female who carries a diagnosis of COPD with chronic cough and mild obstructive pattern on pulmonary functions. The patient has a history of breast cancer and was found to have a pulmonary nodule on follow up imaging.
Multiple nodules
Multiple nodules: MIP image
Multiple nodules: MinIP image
Mosaic attenuation: airway narrowing from neuroendocrine cells
Chromagranin A positive airway cells (neuroendocrine)
Multiple nodules: neuroendocrine tumorlets
Multiple nodules: Chromagranin A positive
Diffuse Idiopathic Neuroendocrine Cell Hyperplasia
DIPNECH

Márcio Rodrigues, MD
Centro Hospitalar S. Joao
Porto, Portugal
Cardiovascular Best Case
51 year old male with anginal chest pain. EKG showed anterior infarction pattern in LAD (left anterior descending coronary aneurysm) territory.
Cardiac CTA: oblique sagittal reformats (pre- and post-contrast) show a large abnormal contrast collection, possibly a coronary aneurysm or thick-walled cavity (yellow arrows) located at the anterior/superior aspect of the heart.
Cardiac CTA: oblique coronal reformat image shows a fistulous connection (red circle) between the left ventricle and contrast collection.
Cardiac CTA: oblique MPR and straightened curved MPR with transverse slices further reveals the LAD (left anterior descending artery) also communicates with this large contrast collection along anterior cardiac surface.
Nuclear medicine FDG-PET/CT imaging shows FDG uptake within the thick margins of the fluid collection, an atypical finding in coronary artery aneurysm.
Intraoperative photos show whitish tissue (red arrows) related to the myocardium that marginates the LAD aneurysm. Thrombotic material was also found within the aneurysm.
HISTOPATHOLOGY

LEFT: Low power – fascicular pattern of cells (arrows)

RIGHT: High power – sarcomatous tumor cells with high mitotic index (arrows)
Left Ventricular Sarcoma, complicated by LAD aneurysm and LV fistulization

Joaquin Moran Marsili, MD
Hospital Universitario La Paz
Madrid, Spain
Pediatric Best Case
History

31 year-old female at 26w1d gestation with a complex prenatal history who presented to her obstetrician because of upper and lower extremity edema, facial swelling, and oliguria. She was admitted with edema, hypertension, and proteinuria concerning for Mirror Syndrome. The baby was delivered via cesarean section due to the development of severe vision changes. The female neonate was intubated due to respiratory distress.
Fetus-in-fetu and Fetiform Teratoma

Monica Reddy, MD
University of North Carolina
Chapel Hill, NC
Clinical Information

67 yo female noted a lump in her left breast that was firm and mobile.
Diagnostic Left Mammogram
Repeat Mammogram 6 mo Later
US of Left breast mass
Lumpectomy Specimen
Histology
Primary Osteosarcoma of the Breast

Ilona Dekkers, M.D.
Leiden University Medical Center
Leiden, Netherlands
Genitourinary Best Case
Clinical Information

60-year-old male presented with 15kg unintentional weight loss in the past four months. The physical examination revealed a visible, non-tender and non-mobile infra-umbilical mass. No significant past medical or family history. Minimally elevated WBC count.
Urachal Adenocarcinoma

Willian Schmitt
Internato Complementar de Radiologia
Lisbon, Portugal