BEST CASES OF THE AIRP

April 23 – May 18, 2012
Musculoskeletal Best Case
34-year-old female presented with increasing pain in left knee and thigh
In Dog

Infested animal organs eaten by dog

Worm matures in dog's small intestine

In cattle, sheep, hogs, man

Life cycle of Echinococcus granulosus

Laminated membrane

Germinal cell layer

Brood capsules

Endogenous daughter cysts

Fertile

Sterile

Scolices

Sterile area

Hydatid cyst develops in liver (and/or lung, brain and other organs)

Exogenous cysts (in alveolar type)

Ova passed in feces

Ova ingested by sheep, cattle, hogs, man

CIBA
Neuroradiology Best Case
64-year-old male presented to ER with 2 month history progressively worsening sore throat, one month history of dysphagia with increasing odynophagia
Squamous Cell Carcinoma

Arindam R. Chatterjee, MD
University of Tennessee
Memphis, Tennessee
Genitourinary Best Case
60-year-old man with hyperglycemia and hypertriglyceridemia
Adrenal Cortical Adenoma in Adrenohepatic Union

Youichi Machida, MD
Tokyo Medical and Dental University
Tokyo, Japan
PULMONARY AND MEDIASTINAL IMAGING
50-year-old male with cough and left arm pain
Thyrocervical trunk injection
Paraganglioma
(middle mediastinum)

Christopher A. Potter, MD
University of Washington
Seattle, Washington
Cardiovascular Imaging
40 year old female from El Salvador presents with one week of intermittent chest pain preceded by six month history of abdominal pain, nausea and vomiting.

EKG shows ST abnormalities and left ventricular hypertrophy.

Labwork reveals peripheral eosinophilia (17% differential) and positive findings of Strongyloides stercoralis infection.
Echocardiogram showed large mass (arrow) filling left ventricular chamber.
Contrast-enhanced chest CT shows non-enhancing filling defects at apex of both right ventricle and left ventricle (arrows).
MRI delayed enhancement 4-chamber view shows hyperenhancement of the subendocardium of right ventricle (yellow arrow) & left ventricle (white arrow). Non-enhancing LV thrombus marked with red arrow.
MRI diffusion weighted imaging sequence 4-chamber view shows increased signal in left ventricle corresponding to edema (white arrow). Abnormalities do not correspond to a vascular territory.
Gross resected fragments of thrombus and thickened subendocardium from left ventricle (upper image) and right ventricle (lower image).

Pathology: subendocardial fibrosis with organizing mural thrombus.
Tropical Subendocardial Fibrosis Associated with Hypereosinophilic Syndrome from Strongyloides Infestation

Ainel Boonprakong, MD
Mayo Clinic
Rochester, Minnesota
Pediatric Best Case
6-year-old male with history of blindness, seizure disorder, diabetes insipidus and cognitive delay
De Morsier Syndrome – Septooptic Dysplasia and Bilateral Schizencephaly

Daniel Klein, MD
Staten Island University Hospital
Staten Island, New York
Breast Best Case
39-year-old Japanese woman presented with a mass in the left breast. The patient had been in excellent health until 7 months prior to admission, at which time a screening ultrasonography detected a mass in the inner lower quadrant. She had no family history of breast cancer. At her first visit, she was lactating after childbirth.
Diagnostic Ultrasound
PET/CT Fusion of Chest
MRI Left Breast
MRI/Gross Correlation
MRI/Histopathology Correlation
Invasive Micropapillary Carcinoma

- Age 25 – 89 years
- Form of invasive ductal carcinoma
  - Palpable mass
  - May be pure (>75%) or mixed with other types of ductal carcinoma
- Lymphatic or vascular invasion in > 50%
- Best treated with mastectomy
Invasive Micropapillary Carcinoma

Youichi Machida
Tokyo Medical and Dental University
Tokyo, Japan
Gastrointestinal Best Case
26-year-old man with a two year history of vague abdominal pain found to have a palpable epigastric mass on physical examination
Hepatic Arterial Phase

Hepatobiliary Phase
Hepatocellular Adenoma, β-Catenin Mutated, with Malignant Transformation to Hepatocellular Carcinoma

Jens De Cock
Katholieke Universiteit Leuven,
Kortrijk, Belgium
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