Musculoskeletal Best Case
46-year-old female presented with left lower leg pain for 7 months. She has a history of traumatic fracture of the left lower leg after falling, and it has appeared deformed since then.
Adamantinoma

Anilawan Smithimedhin, MD
Mahidol University
Nakhon Pathom, Thailand
Neuroradiology Best Case
A 67-year-old male presented at age 59 with trembling gait, slurred speech and excessive perspiration as well as inability to write and drive. At 60, he underwent MRI which detected cerebellum and brain stem atrophy. He frequently experienced orthostatic fainting. At 64, he was unable to walk and due to his mobility impairments he started using a wheelchair. At home at the age of 67 he passed away.
Multisystem Atrophy-C

Kimiteru Ito, MD
Japanese College of Radiology Fellowship
Tokyo, Japan
Genitourinary Best Case
27-year-old female with past history of two caesarian sections at 11 weeks gestation reports 2 episodes of spotting and crampy abdominal pain
Lower Uterine Segment/Cervical Ectopic Pregnancy with Placenta Increta

Ajay Puri, MD
Baystate Medical Center
Springfield, Massachusetts
PULMONARY AND MEDIASTINAL IMAGING
52-year-old male, with known diagnosis of lung cancer, awakened coughing up blood. The patient could not be revived when brought to the emergency room.
**Arterial Erosion**

**Venous Erosion**

**Airway Erosion**
Arterial Erosion

Venous Erosion

Airway Erosion
Small Cell Lung Cancer
Erosion of the pulmonary artery, vein and bronchus

Patricia Flach, MD
University of Bern
Bern, Switzerland
Cardiovascular Imaging
52 year old female presents to ER with two-day history of dyspnea. The patient emigrated from Romania 20 years ago.

EKG and transthoracic echocardiogram reveal atrial fibrillation and severe mitral regurgitation.
Axial, coronal & sagittal CT reformatted images confirm a complex grouping of cystic structures with punctate mural calcification associated with the left ventricle.
4-chamber SSFP and 3-chamber triple inversion recovery MR images of the heart demonstrate a complex, multi-septated mass invading the basal inferolateral segment of the left ventricle, resulting in mitral regurgitation.

Thin curvilinear structure inside some cysts (lower image) is characteristic of daughter cyst membrane detachment.
Resected specimen shows distended and collapsed cystic structures. Some cysts are lined by fibrous tissue and polypoid lesions.
Histologic examination reveals classic hooklets of *echinococcus* (left, H&E) with lamellated cyst walls (right, trichrome stain).
Additional history provided by the patient: hepatic echinococcal infection approximately 15 years ago.
Cardiac Cystic Echinococcus

Thomas Ward, MD
Mount Sinai Medical Center
New York, New York
Pediatric Best Case
15-year-old with 3 days of diffuse abdominal pain and 1 day of vomiting
Inflammatory Myofibroblastic Tumor, Intussusception

Vincent Yang, MD
University of Texas Health Science Center
Houston, Texas
Breast Best Case
42-year-old African American female presented with history of enlarging left breast mass. Patient is G4P4 with menarche occurring at age 15. There is a family history of breast cancer in her paternal grandmother who died of the disease at age 81. Her daughter had ovarian cancer at 27 years of age. The patient is status post right oophorectomy for an unknown reason.
Digital Mammogram
Ultrasound
Gross
Histology
Choristoma
(Hamartoma containing muscle and cartilage)

Kyle Hayden, MD
University of Florida Health Science Center
Jacksonville, Florida
Gastrointestinal Best Case
42-year-old man with intermittent episodes of right upper quadrant pain, jaundice, and low-grade fever
Annular Pancreas

Gregory Havlena, MD
Stanford University,
Stanford, California
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