

Visual Diagnosis

新光急診 張志華

This patient presented with fatigue, fever, anorexia, and weight loss. What is the most likely diagnosis?

- 1. Leukemia**
- 2. Scurvy**
- 3. Acquired immunodeficiency syndrome**
- 4. Sarcoidosis**
- 5. Pellagra**



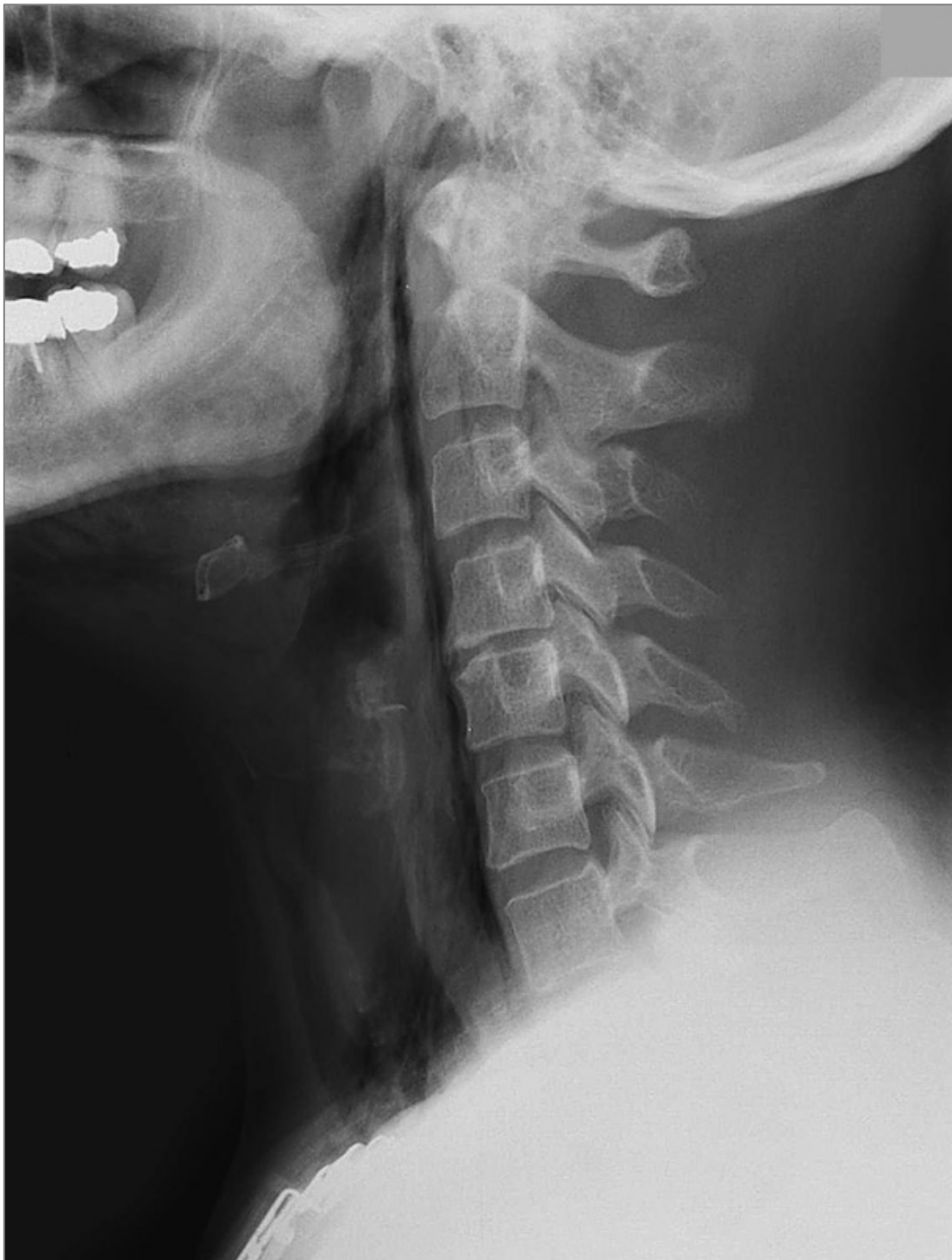
Q: This patient presented with fatigue, fever, anorexia, and weight loss. What is the most likely diagnosis?

Answer:

1. Leukemia

Gingival infiltration in a patient with fever, fatigue, and weight loss is most suggestive of acute leukemia, especially monocytic variants of acute myelogenous leukemia. This patient's gingival infiltration resolved after treatment for acute myelomonocytic leukemia.

Read More: New Engl J Med 358;3:274



This patient developed difficulty swallowing following a dental procedure. What is the diagnosis?

- 1. Spondylolisthesis**
- 2. Prevertebral air**
- 3. Pharyngeal diverticulum**
- 4. Pharyngeal foreign body**
- 5. Periodontal abscess**

Image Challenge

Q: This patient developed difficulty swallowing following a dental procedure. What is the diagnosis?

Answer:

2. Prevertebral air

The radiograph shows emphysema with prevertebral air in the cervical soft tissues. A high-speed dental drill was implicated.



What is the diagnosis?

- 1. Cholesterol emboli**
- 2. Acute arterial insufficiency**
- 3. Deep venous thrombosis**
- 4. Frost bite**
- 5. Thromboangiitis obliterans**

Image Challenge

Q: What is the diagnosis?

Answer:

3. Deep venous thrombosis

This patient was diagnosed with phlegmasia cerulea dolens, an uncommon manifestation of deep vein thrombosis. Unilateral swelling with discoloration makes arterial insufficiency less likely.

Read More: New Engl J Med 356;3:e3



What is the diagnosis?

- 1. Dental abscess**
- 2. Neurofibromatosis type 1**
- 3. Cleft jaw**
- 4. Hemiatrophy syndrome**
- 5. Mandibular fracture**

Image Challenge

Q: What is the diagnosis?

Answer:

5. Mandibular fracture

This patient developed a comminuted fracture of the left and right mandible after being struck on his right lower jaw. The open fracture allowed upward displacement of the left half of the mandible.

This 6-year-old boy presented with fever and rash that did not improve despite treatment with cephalexin. What diagnosis is suggested?

- 1. Bullous pemphigoid**
- 2. Staphylococcal scalded skin**
- 3. Stevens-Johnson syndrome**
- 4. Herpes simplex infection**
- 5. Kawasaki disease**



Image Challenge

Q: This 6-year-old boy presented with fever and rash that did not improve despite treatment with cephalexin. What diagnosis is suggested?

Answer:

2. Staphylococcal scalded skin

Flaccid bullae, perioral crusting and fever suggest the staphylococcal scalded skin syndrome. The patient improved following treatment with intravenous nafcillin.

This patient underwent computed tomography of the pelvis having presented with lower extremity edema. What diagnosis is suggested?

- 1. Uterine fibroid**
- 2. Ovarian cyst**
- 3. Urinary retention**
- 4. Teratoma**
- 5. Aortic aneurysm**

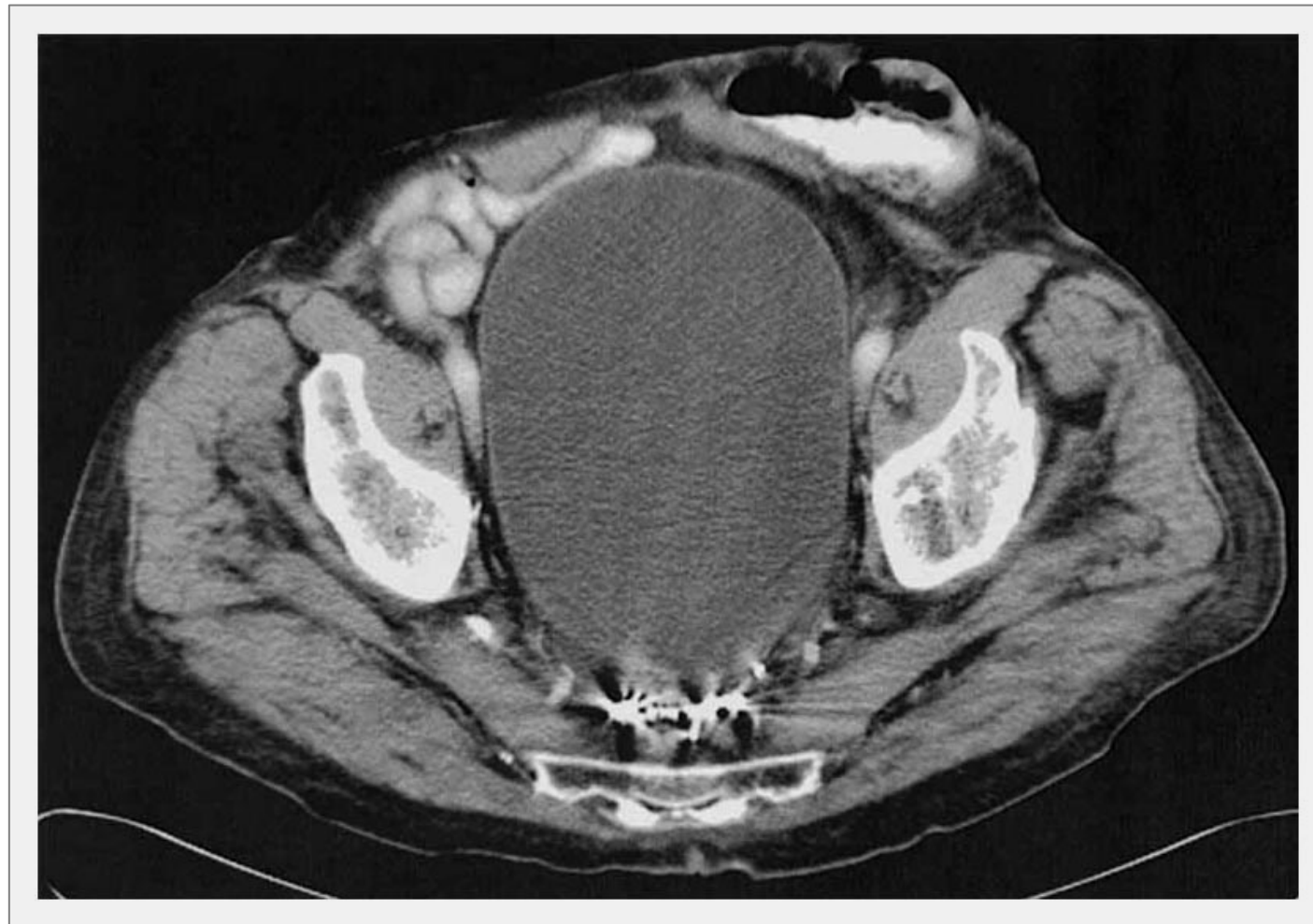


Image Challenge

Q: This patient underwent computed tomography of the pelvis having presented with lower extremity edema. What diagnosis is suggested?

Answer:

3. Urinary retention

Bladder outflow obstruction resulted in bladder distension and compression of the iliac veins.

Read More: New Engl J Med 354;6:e5

What is the diagnosis?

1. Digitalis intoxication
2. Dextrocardia
3. Pacemaker malfunction
4. Electrical alternans
5. Cardiac allograft

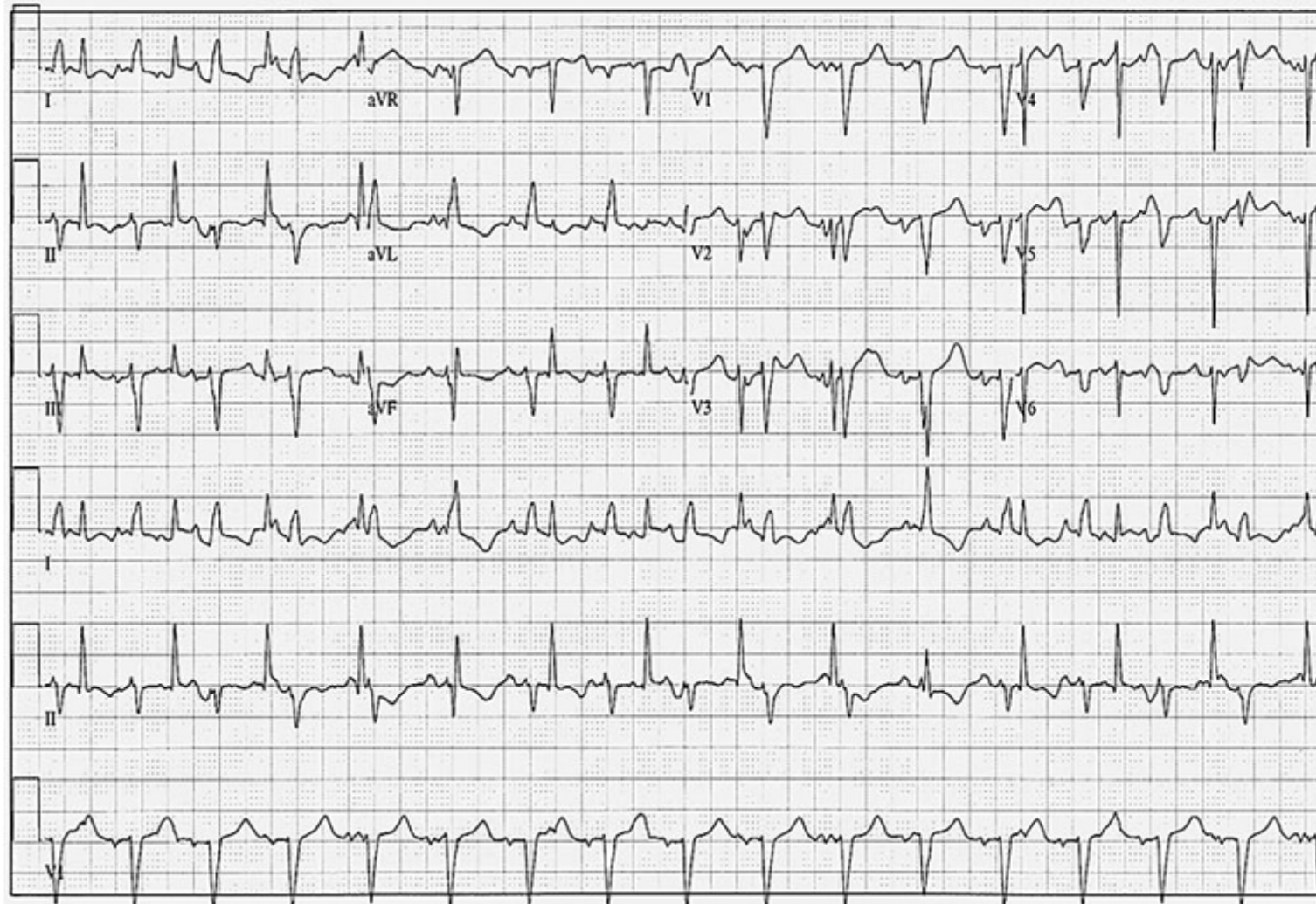


Image Challenge

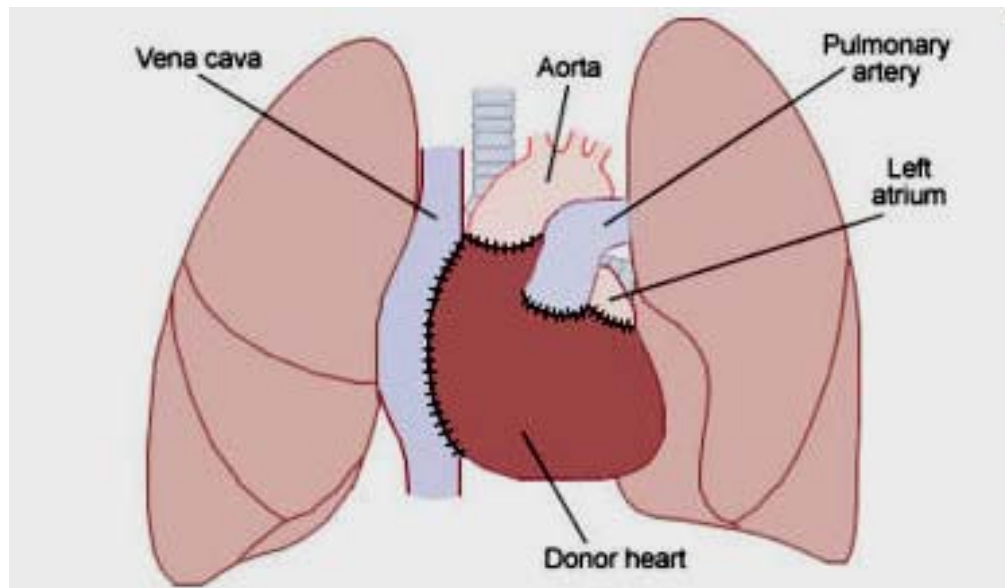
Q: What is the diagnosis?

Answer:

5. Cardiac allograft

The electrocardiogram shows two QRS complexes with different axes. The patient has a cardiac allograft in addition to his native heart.

Read More: New Engl J Med 356;7:e6



Q: This 16-year-old boy presented with malaise and fever. What is the diagnosis?

- 1. Scarlet fever**
- 2. Infectious mononucleosis**
- 3. Measles**
- 4. Mumps**
- 5. Coxsackie viral infection**



Image Challenge

Q: This 16-year-old boy presented with malaise and fever. What is the diagnosis?

Answer:

3. Measles

The evanescent white papules on the buccal mucosa, Koplik's spots, are diagnostic of measles.

Read More: New Engl J Med 354;7:740

Q: What is the most likely diagnosis?

- 1. Cisplatin overdose**
- 2. Lesch-Nyhan syndrome**
- 3. Rhabdomyolysis**
- 4. Primary hyperparathyroidism**
- 5. Ethylene glycol poisoning**

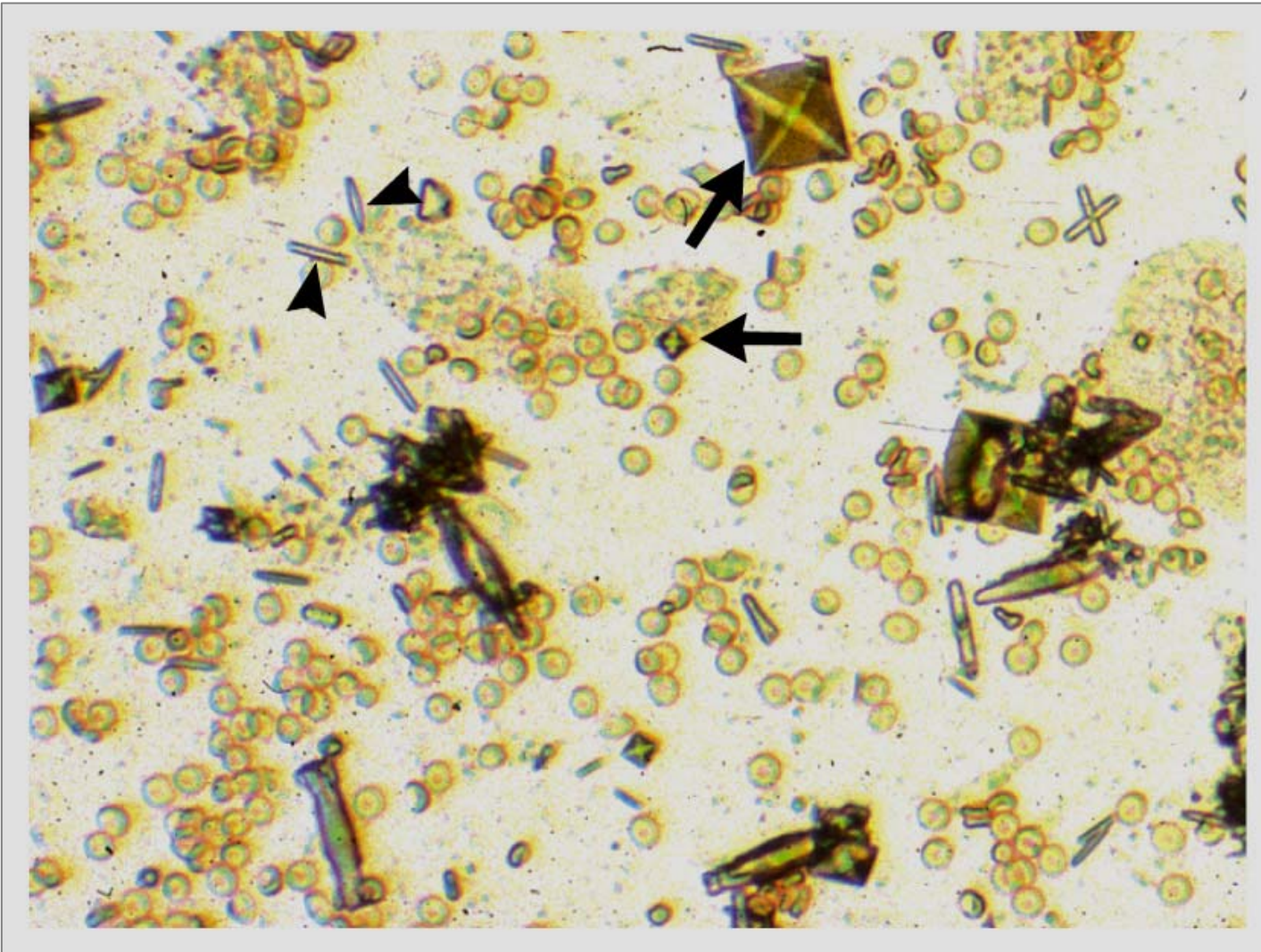


Image Challenge

Q: What is the most likely diagnosis?

Answer:

5. Ethylene glycol poisoning

This urine sediment contains calcium oxalate crystals of two types. The crystals shaped like envelopes with diagonally crossing lines are octahedrons of calcium oxalate dihydrate. The needle-shaped crystals are calcium oxalate monohydrate. Calcium oxalate monohydrate crystals are rarely seen in the urinary sediment but are typical of ethylene glycol ingestion, and therefore when seen, they strongly suggest the diagnosis.

Read More: New Engl J Med 354;10:1065



This patient's serum was found to be discolored four hours following a surgical procedure. What is the most likely cause?

- 1. Fluorescent dye**
- 2. Methemoglobinemia**
- 3. Propofol**
- 4. Pseudomonal sepsis**
- 5. Ethylene glycol**

Image Challenge

Q: This patient's serum was found to be discolored four hours following a surgical procedure. What is the most likely cause?

Answer:

1. Fluorescent dye

The patient had undergone intraoperative angiography with a fluorescent dye and a Wood's lamp was used to evaluate mesenteric-vessel viability.

Read More: New Engl J Med 356;11:e10

A patient with this tomogram would be most likely to present with which one of the following signs?

1. Unilateral blindness
2. Hemiplegia
3. Alexia without agraphia
4. Hemiballismus
5. Internuclear ophthalmoplegia



Image Challenge

Q: A patient with this tomogram would be most likely to present with which one of the following signs?

Answer:

2. Hemiplegia

The tomogram shows a calcified object in the proximal right middle cerebral artery. Occlusion of the middle cerebral artery would be most likely to be associated with contralateral hemiparesis, as in this case. The other listed choices represent stroke syndromes that most typically involve other vascular territories.

Read More: New Engl J Med 358;15:e17



This 46-year-old woman developed pruritus and similar papular lesions over her axillae, groin, and buttocks. What is the most likely diagnosis?

- 1. Pilonidal sinus**
- 2. Psoriasis**
- 3. Impetigo**
- 4. Dermatomyositis**
- 5. Scabies**

Image Challenge

Q: This 46-year-old woman developed pruritus and similar papular lesions over her axillae, groin, and buttocks. What is the most likely diagnosis?

Answer:

5. Scabies

These lesions were caused by bird mite, and are similar to the lesions caused by scabies.

Read More: New Engl J Med 354;16:1728

Which structure is most dilated?

- 1. Aorta**
- 2. Left atrium**
- 3. Left ventricle**
- 4. Right atrium**
- 5. Right ventricle**

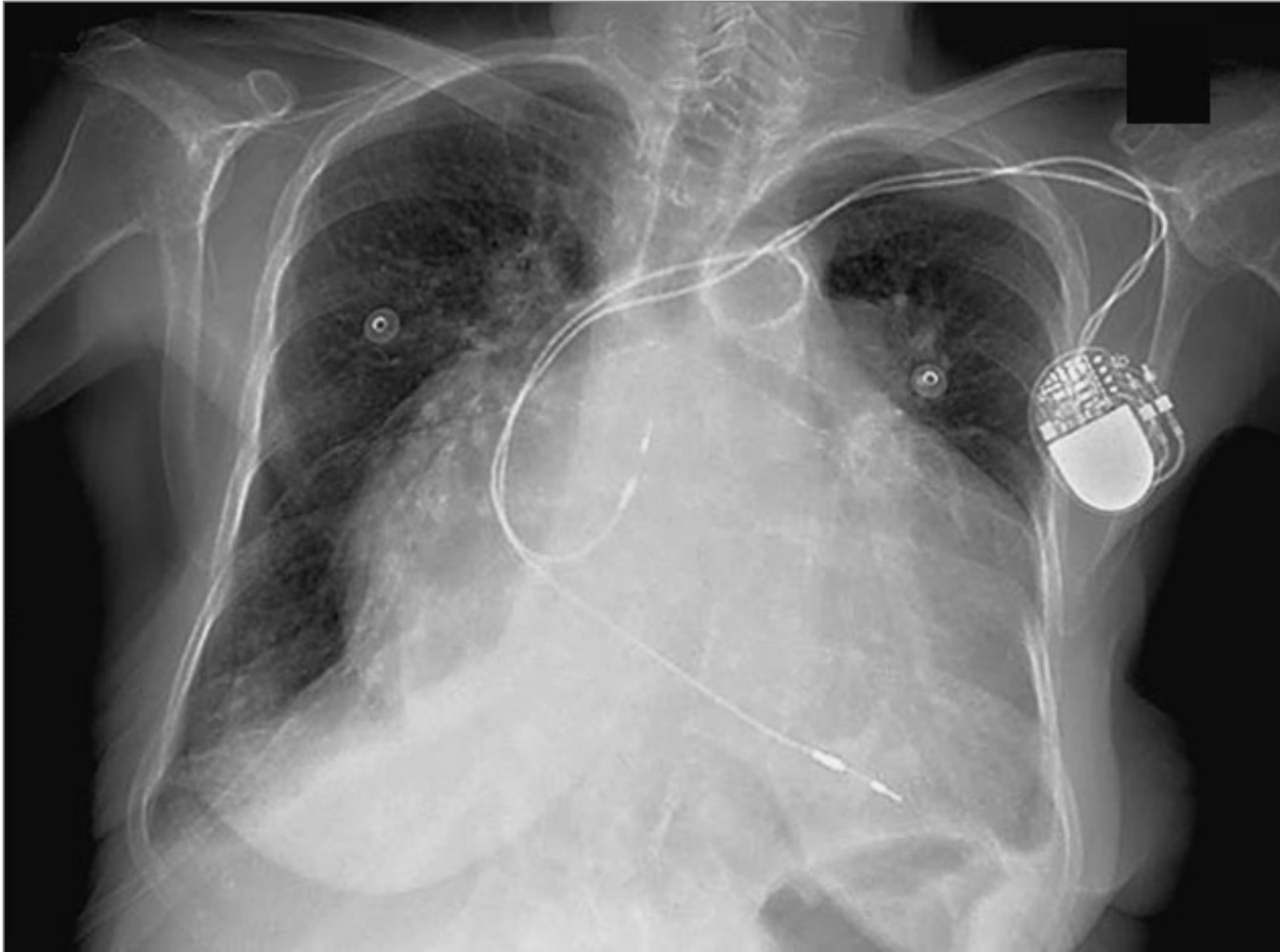


Image Challenge

Q: Which structure is most dilated?

Answer:

2. Left atrium

The chest radiograph reveals cardiomegaly, with splaying of the carina and an elevated left main bronchus. These findings are most suggestive of an enlarged left atrium.

Read More: New Engl J Med 358;19:2050

This 61-year-old man presented with abdominal pain. Basophilic stippling was evident on a blood smear. What is the most likely diagnosis?

- 1. Acute myelogenous leukemia**
- 2. Chronic lead poisoning**
- 3. Beta-thalassemia**
- 4. Megaloblastic anemia**
- 5. Sickle cell anemia**

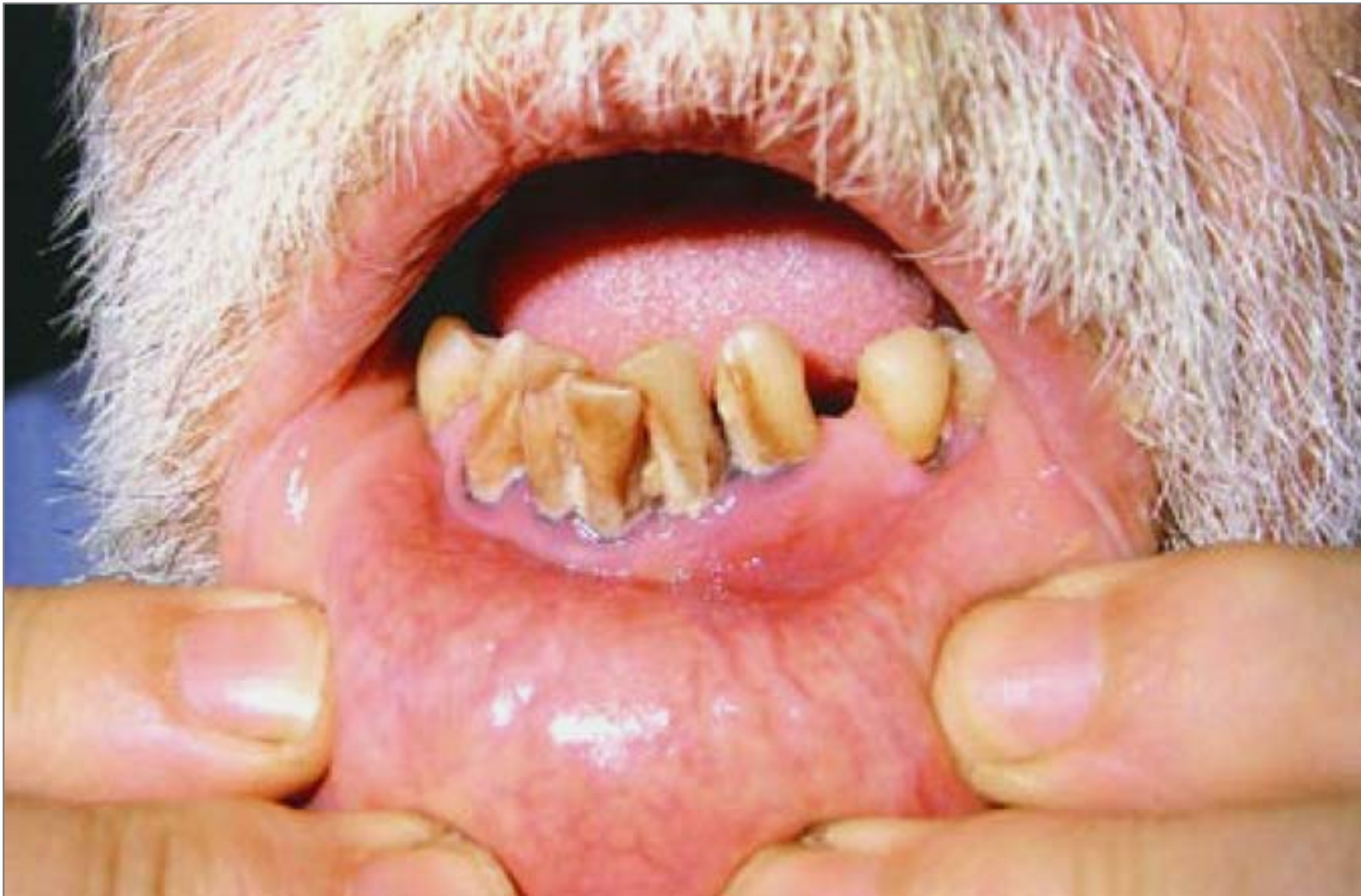


Image Challenge

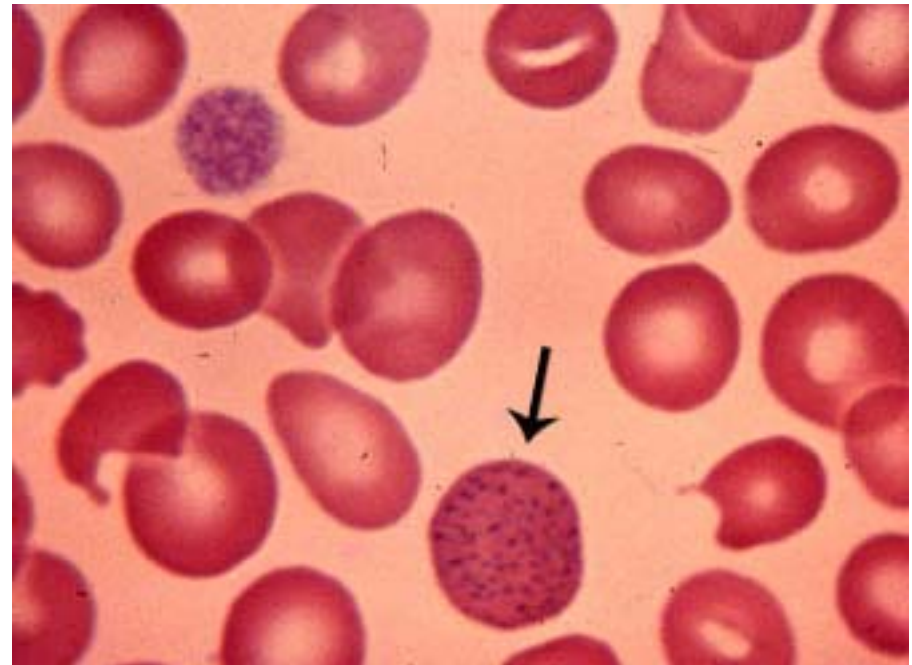
Q: This 61-year-old man presented with abdominal pain. Basophilic stippling was evident on a blood smear. What is the most likely diagnosis?

Answer:

2. Chronic lead poisoning

Chronic lead poisoning was the diagnosis in this case. Lead poisoning is associated with abdominal pain, blue discoloration of the gums, and basophilic stippling.

Read More: New Engl J Med 354;20:e21



Q: Treatment with which antihypertensive is most likely to cause this appearance?

- 1. Beta-blocker**
- 2. Diuretic**
- 3. Alpha-blocker**
- 4. Angiotensin converting-enzyme inhibitor**
- 5. Calcium-channel blocker**



Image Challenge

Q: Treatment with which antihypertensive is most likely to cause this appearance?

Answer:

4. Angiotensin converting-enzyme inhibitor

Angioedema of the tongue is most associated with treatment with an angiotensin converting-enzyme inhibitor.

Read More: New Engl J Med 355;3:295

Q: This 12-year-old boy presented with abdominal pain. What is the diagnosis?

- 1. Cowden syndrome**
- 2. Cronkhite-Canada syndrome**
- 3. Osler-Weber-Rendu syndrome**
- 4. Peutz-Jeghers syndrome**
- 5. VonWillebrand syndrome**



Image Challenge

Q: This 12-year-old boy presented with abdominal pain. What is the diagnosis?

Answer:

4. Peutz-Jeghers syndrome

The presence of mucocutaneous pigmented lip lesions suggests the diagnosis of Peutz-Jeghers syndrome, an autosomal dominant disorder characterized by development of multiple hamartomatous gastrointestinal polyps.

Read More: New Engl J Med 357;8:e9

Q: This 38-year-old woman developed recurrent right-sided chest pain synchronously with her menses. What is the most likely diagnosis?

- 1. Recurrent pulmonary emboli**
- 2. Alpha-1 antitrypsin deficiency**
- 3. Meig's syndrome**
- 4. Thoracic endometriosis**
- 5. Lymphangiomyomatosis**

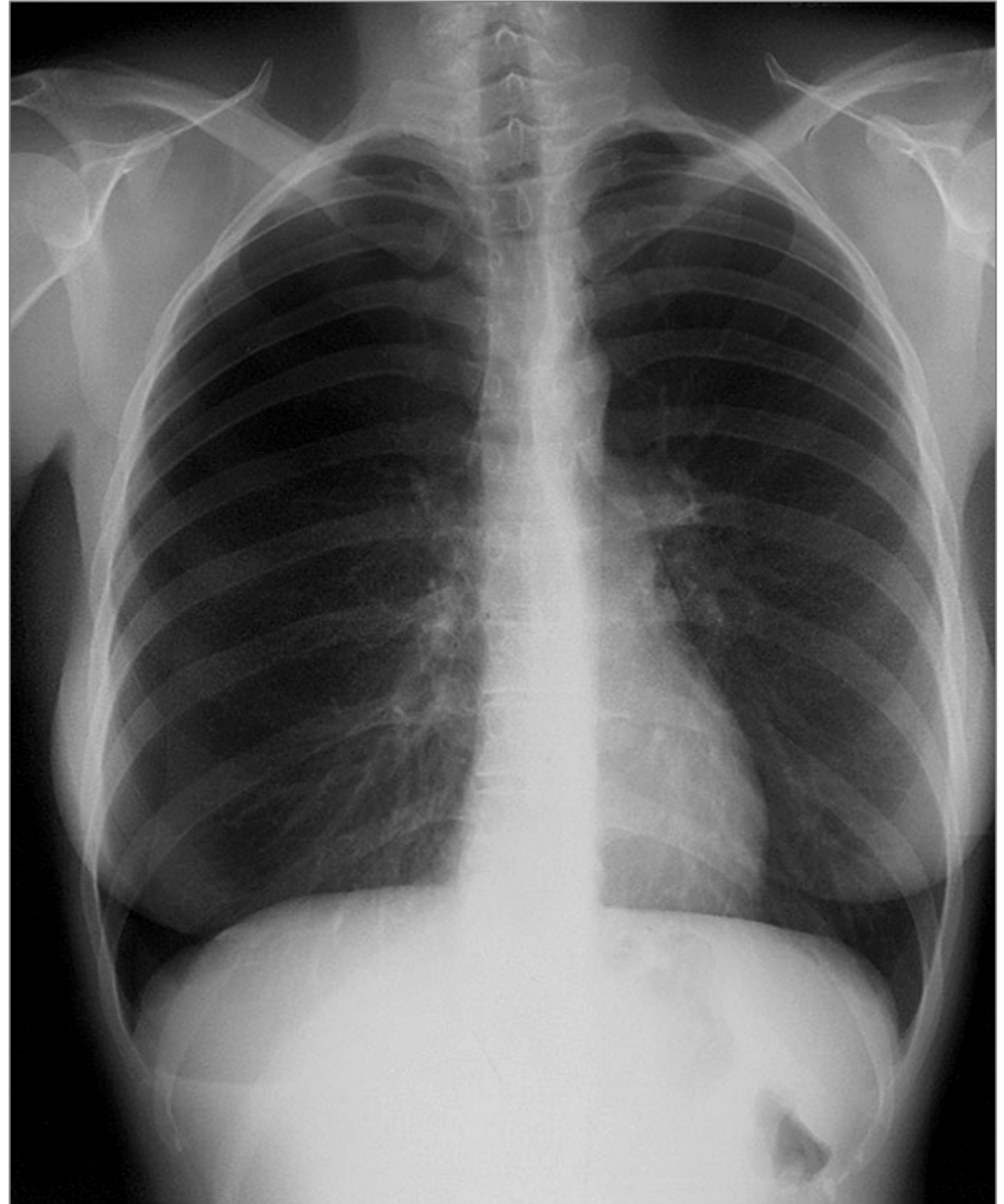


Image Challenge

Q: This 38-year-old woman developed recurrent right-sided chest pain synchronously with her menses. What is the most likely diagnosis?

Answer:

4. Thoracic endometriosis

Her chest radiography demonstrated pneumothorax; endometrial deposits were identified during thoracoscopy implicating catamenial pneumothorax as the cause of her chest pain.

Read More: New Engl J Med 355;10:e9

Q: What is the diagnosis?

- 1. Pancreatic pseudocyst**
- 2. Duodenal torsion**
- 3. Cholangiocarcinoma**
- 4. Gallbladder lipomatosis**
- 5. Emphysematous cholecystitis**

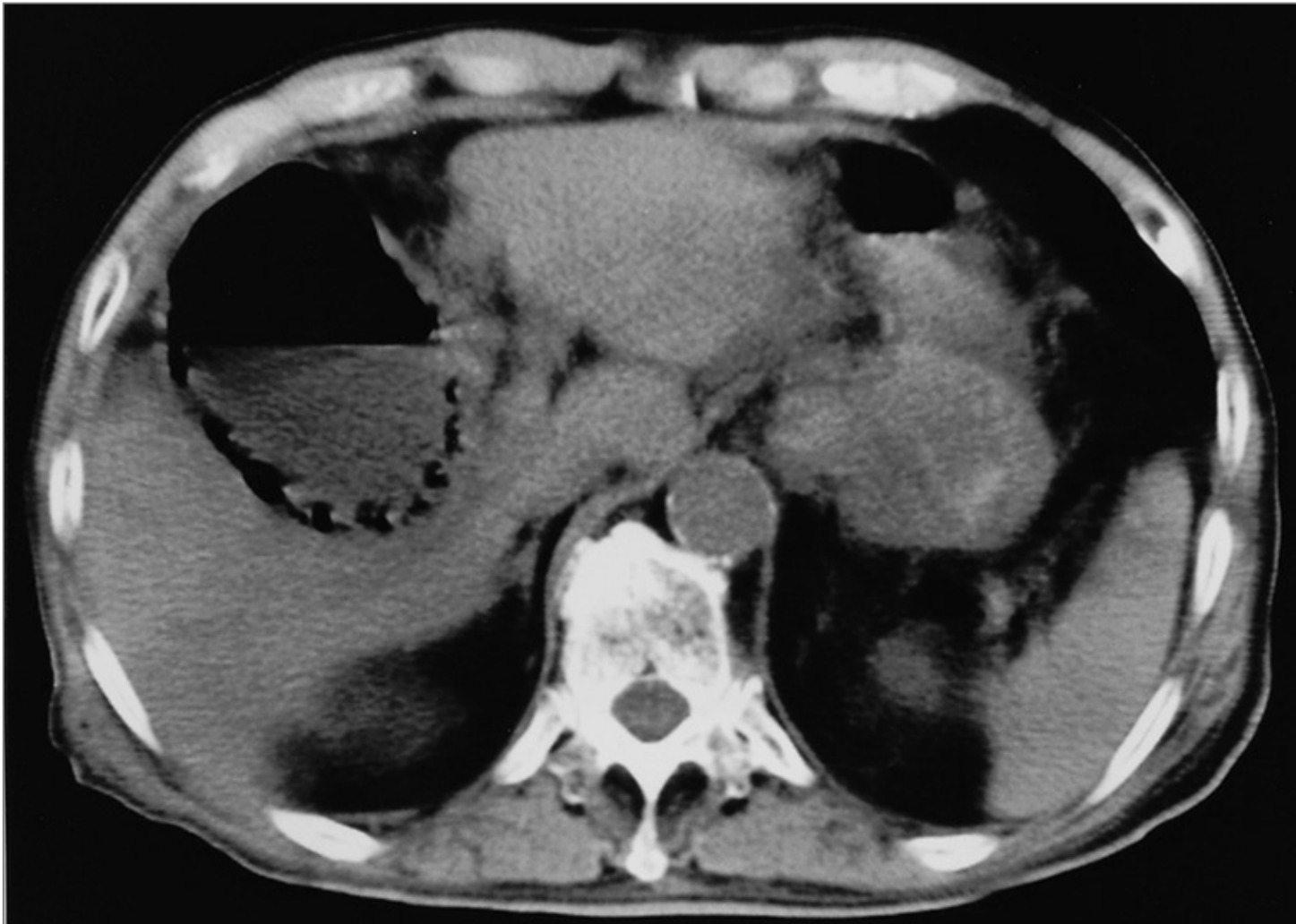


Image Challenge

Q: What is the diagnosis?

Answer:

5. Emphysematous cholecystitis

The computed tomogram shows an air-fluid level in the lumen of a dilated gallbladder and gas within the gallbladder wall. These findings suggest emphysematous cholecystitis.

Read More: New Engl J Med 348;23:2329

Q: An elderly woman presented with abdominal pain and vomiting for three days. A computed tomogram of the abdomen was obtained. What is the diagnosis?

- 1. Cecal volvulus**
- 2. Intussusception**
- 3. Mesenteric ischemia**
- 4. Obturator hernia**
- 5. Ovarian cancer**

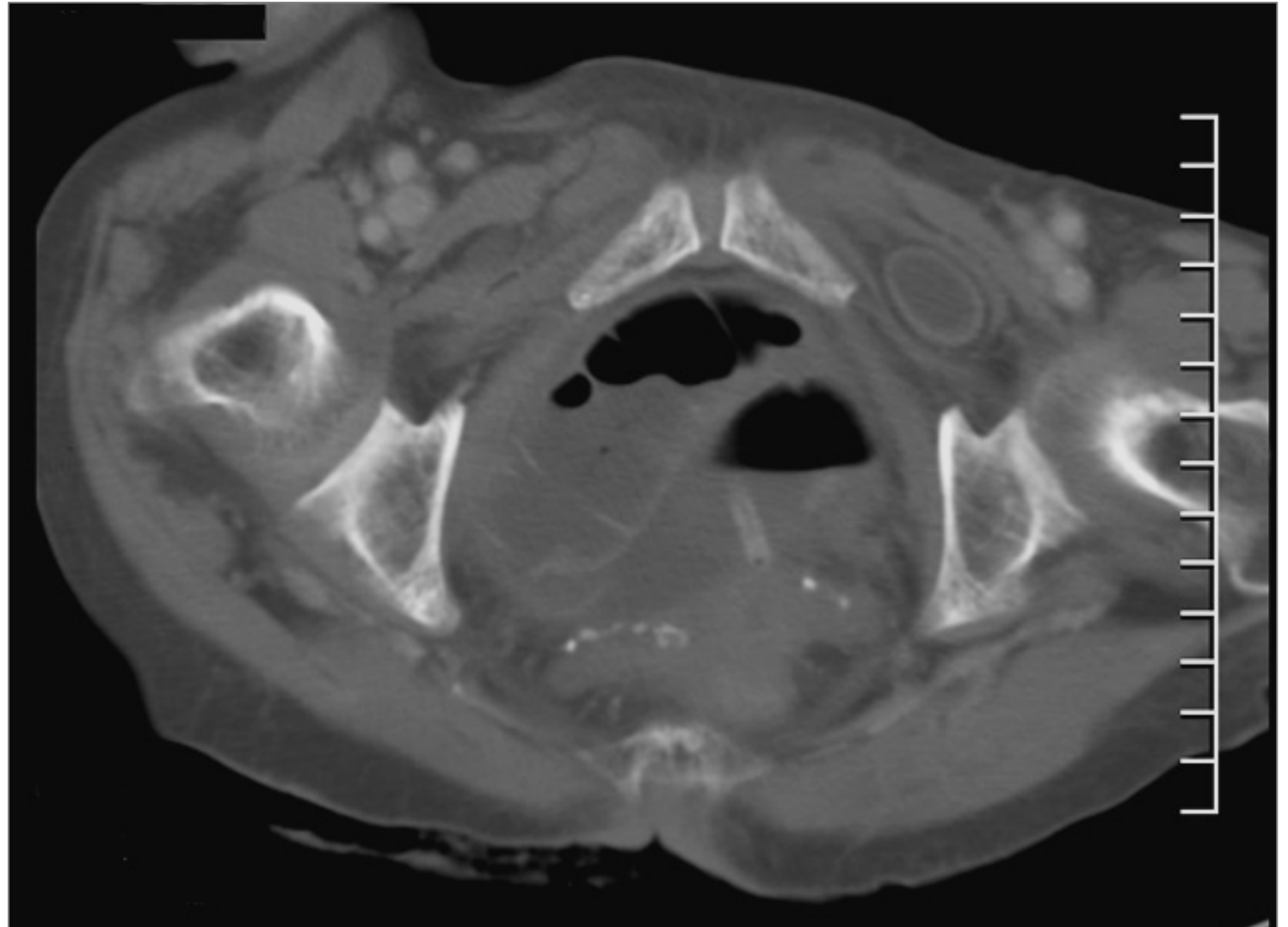


Image Challenge

Q: An elderly woman presented with abdominal pain and vomiting for three days. A computed tomogram of the abdomen was obtained. What is the diagnosis?

Answer:

4. Obturator hernia

An obturator hernia was diagnosed.

Read More: New Engl J Med 355;16:1714

Q: What is the diagnosis?

- 1. Left facial palsy**
- 2. Cavernous sinus thrombosis**
- 3. Orbital lymphoma**
- 4. Herpes zoster ophthalmicus**
- 5. Orbital fracture**



Image Challenge

Q: What is the diagnosis?

Answer:

4. Herpes zoster ophthalmicus

The image illustrates a left VI nerve palsy from herpes zoster ophthalmicus.

Read More: New Engl J Med 353;16:e14

Q: What is the diagnosis?

- 1. Cellulitis**
- 2. Erysipelas**
- 3. Pemphigus**
- 4. Necrotizing fasciitis**
- 5. Steven-Johnson Syndrome**



Necrotizing Fasciitis

- Diagnosis:
 - Traditional infection signs – redness, swelling, local heat and tenderness
 - Marked edema extending beyond erythema
 - Bullae formation (hemorrhagic)
 - Crepitus
 - Radiologic evidence of gas within tissues
 - Rapidly progressive infection

Q: This patient presented with lower extremity edema. What is the diagnosis?

- 1. Cardiac amyloidosis**
- 2. Mitral stenosis**
- 3. Constrictive pericarditis**
- 4. Left ventricular aneurysm**
- 5. Mediastinal lymphoma**



Image Challenge

Q: This patient presented with lower extremity edema. What is the diagnosis?

Answer:

3. Constrictive pericarditis

This patient had developed cardiac constriction due to a calcified pericardium.

Read More: New Engl J Med 355;17:e19

Q: What is the diagnosis?

- 1. Bezoar**
- 2. Pericardial effusion**
- 3. Pneumatosis coli**
- 4. Gastric carcinoma**
- 5. Pheochromocytoma**



Image Challenge

Q: What is the diagnosis?

Answer:

1. Bezoar

The computed tomography shows a large gastric mass that is separate from the gastric wall. Endoscopy revealed a large trichobezoar occluding nearly the entire stomach.

Read More: New Engl J Med 357;21:e23

Q: What is the diagnosis?

- 1. Fabry's disease**
- 2. Hereditary hemorrhagic telangiectasia**
- 3. Peutz-Jegher's syndrome**
- 4. Roseola**
- 5. Discoid lupus**



Image Challenge

Q: What is the diagnosis?

Answer:

3. Peutz-Jegher's syndrome

The mucocutaneous pigmentation is most consistent with Peutz-Jeghers syndrome.

Q: This urine sample was photographed under light microscopy. What type of crystal is illustrated?

- 1. Urate**
- 2. Oxalate**
- 3. Cysteine**
- 4. Ethylene glycol**
- 5. Triphosphate**



Image Challenge

Q: This urine sample was photographed under light microscopy. What type of crystal is illustrated?

Answer:

2. Oxalate

Calcium oxalate crystals.

Read More: New Engl J Med 353;24:e21

What is the diagnosis?

- 1. Pulmonary hydatid disease**
- 2. Bullous emphysema**
- 3. Pulmonary silicosis**
- 4. Multiple bacterial abscesses**
- 5. Aspergillosis**

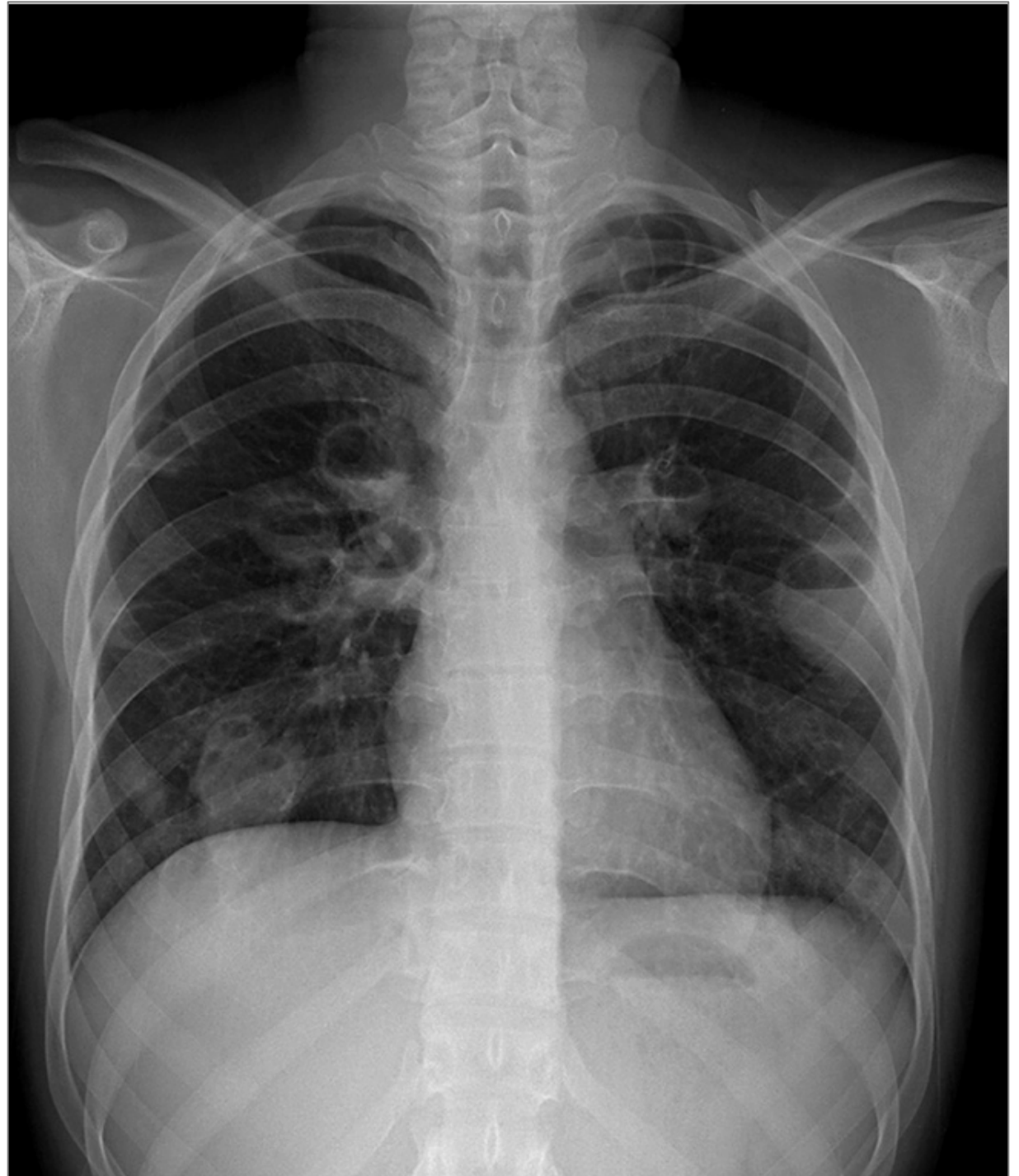


Image Challenge

Q: What is the diagnosis?

Answer:

4. Multiple bacterial abscesses

The finding of bilateral multiple cavitary lesions with air fluid levels is most consistent with multiple pulmonary bacterial abscesses.

Q: What is the diagnosis?

- 1. Aspergillosis**
- 2. Adrenal insufficiency**
- 3. Oral leukoplakia**
- 4. Pellagra**
- 5. Lingua villosa nigra**

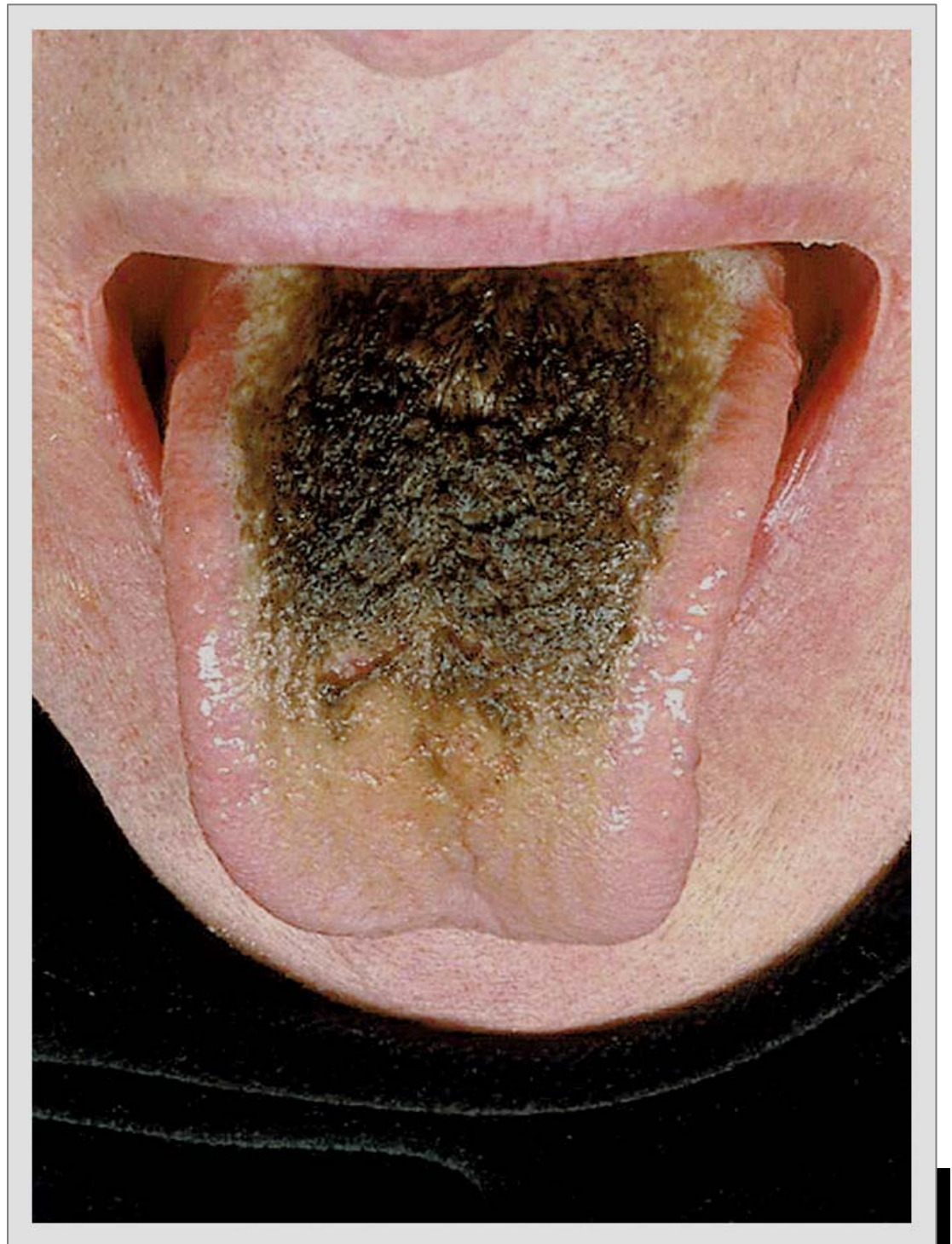


Image Challenge

Q: What is the diagnosis?

Answer:

5. Lingua villosa nigra

Black hairy tongue (also known as lingua villosa nigra) is a painless benign disorder of unclear etiology.

Read More: New Engl J Med 354;1:67

What is the diagnosis?

- 1. CN III palsy**
- 2. CN IV palsy**
- 3. CN VI palsy**
- 4. Orbital wall fracture**
- 5. Optic nerve palsy**

Hit by baseball



Orbital wall fracture / blow-out fracture

- Complications

- Extraocular muscle incarceration
- Enophthalmos
- Retrobulbar hemorrhage

