Case 1

History

A 57-year-old man develops hemoptysis. He has been smoking two packs of cigarettes per day for 30 years. He has had a chronic cough worse in the morning for 10 years. He has had mild dyspnea on exertion for the past 5 years.

Case 1

Identify the cavitary mass
Case 1
The patient undergoes the procedure depicted in the image. Briefly describe the procedure and indication.

Case 1 Surgical specimen - Describe the gross findings. Correlate with the CXR.

Case 1
Describe the low power and 20x findings.
Case 1
Describe the high power findings

Case 1
Describe the histologic findings. What is the cause of the findings on this image?

Case 1
What is your diagnosis?
Correlate the pathology with the clinical presentation and x-ray findings.
Case 1
Describe each of the 3 histologic sections. What process is depicted in the series of images? How does it relate to the diagnosis?

Case 1
Different patient, describe the gross findings. Why is the lesion amenable to biopsy via bronchoscopy?

Case 1
Interpret the laboratory findings and relate to the disease process.
Case 2

History
A 69 year-old woman presents to the emergency department with chest pain.
She has no chronic medical problems. She smoked ½ pack of cigarettes per day during her first two years of college, none since. On physical exam heart, lung, abdominal exams are normal.
A chest x-ray is done and shows a peripheral 9cm mass.

Case 2

Describe the gross findings (note this is a bisected specimen)

Case 2

Describe the low power and 20x findings
Case 2

Describe the high power findings

Case 2

What is your diagnosis?

Case 2

The patient cannot understand why and how she got this disease. “I barely smoked, and that was years and years ago”. How will you respond to the patient?
Case 3
History
A 69 year-old woman presents to the emergency department with chest pain. She has no chronic medical problems. She smoked ½ pack of cigarettes per day during her first two years of college, none since. On physical exam heart, lung, abdominal exams are normal.

Case 3
A chest-xray is done and shows a small peripheral nodule

Case 3
Describe the low power findings
Case 3 -
Describe the findings

Case 3

The focus of pathologic changes measures 2.9 cm in greatest dimension, without findings of micro-invasion.
What is your diagnosis?

Discuss the relationship between this diagnosis and the pathology depicted in case 2. (you can ask case 2 students for assistance)

Case 4

History

A 71 year-old man develops progressive chest pain, dyspnea and back pain. He has had a 20 pound unintentional weight loss over 3 months. He smokes and has a 50 pack year smoking history.
Physical exam reveals hepatomegaly.
Chest X-ray shows enlarged hilar and mediastinal lymph nodes.
CT scan shows bilaterally enlarged adrenal glands and multiple masses in the liver.
Case 4
Describe the gross findings.

Case 4 Describe the low power findings

Case 4- Describe the findings on 20X
Case 5 - Describe the findings on 40x

Case 4
Describe the gross findings and correlate them with the radiologic images seen below

Case 4
What is your diagnosis?
Correlate the gross and histologic findings with the clinical findings.
Case 4
Interpret the laboratory data and correlate with the clinical scenario (the patient appears euveomic)

**BASIC METABOLIC PNl**
- Sodium: 125
- Potassium: 3.9
- Chloride: 94
- CO2: 24
- BUN: 8
- Creatinine: 0.8
- Glucose: 90

Case 5
A 25 year old female presented to the otolaryngology clinic with complaints of recurrent sneezing, rhinorrhoea, productive cough, on and off fever and breathlessness on exertion since childhood. She has had repeated hospital admissions for recurrent chest infections. She has no drug allergies but is allergic to “dust”. Nasal examination revealed boggy, bluish mucosa over bilateral inferior turbinates with mucoid nasal discharge. On chest auscultation there were crepitations and wheezes over bilateral lung fields

Case 5 – Describe the findings

Case courtesy of Dr Sajoscha Sorrentino, Radiopaedia.org, rID: 19942
Case 5 – Describe the pathology

Case 5

Summarize the case

Case 5

What is your diagnosis?

Describe the pathogenesis. Correlate with the clinical findings
Case 6

History
A 33-year old woman is involved in a motor vehicle accident. She sustained minor chest and head trauma. The patient is healthy, works as a school-teacher, and has never smoked. She takes no prescription or over the counter medications. Physical exam is notable for a frontal head hematoma and is otherwise unremarkable. In the ED a head CT and chest-ray were performed.

Case 6
What is the primary abnormality on this radiograph?

![Radiograph Image]

Case 6
The patient was lost to follow-up. She presented several years later with dyspnea.
Case 6 Describe the low power findings in B. Where is the abnormality compared to normal lung in A.

Case 6 Describe the findings on 20x

Case 6 Describe the high power findings
Case 6

Are there any “special stains” that should be performed on the biopsied tissue before rendering a diagnosis?

Case 6

The stains ordered are negative. What is the most likely diagnosis?

If the disease progresses to an advanced stage, histopathologic changes will resemble the findings from which case presented today?

Case 6

Describe other potential clinical manifestations of this disease process (be sure to comment on A, B, C, D, E, F and L).