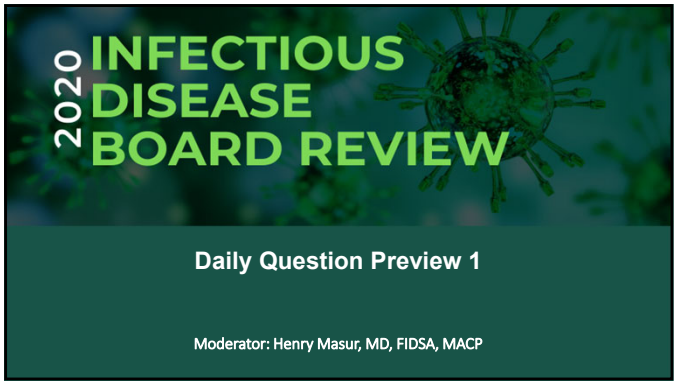
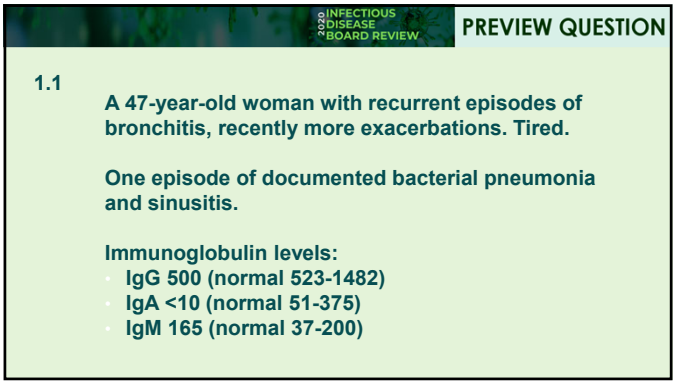
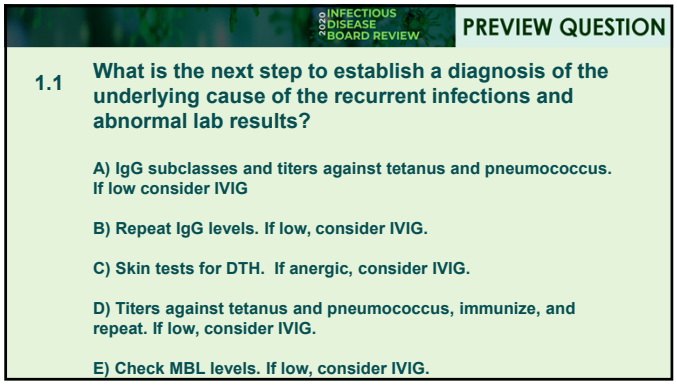
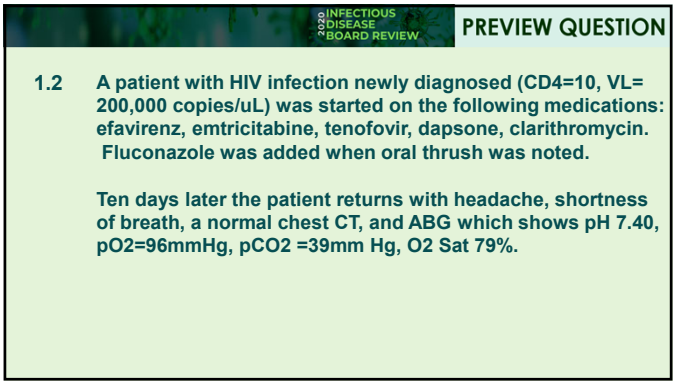
01 – Introduction

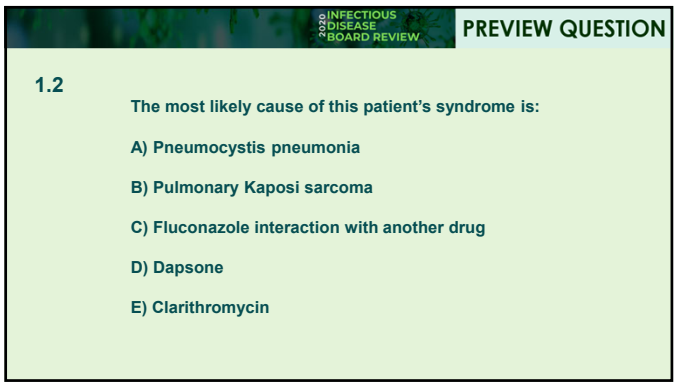
Speaker: John Bennett, MD and Henry Masur, MD

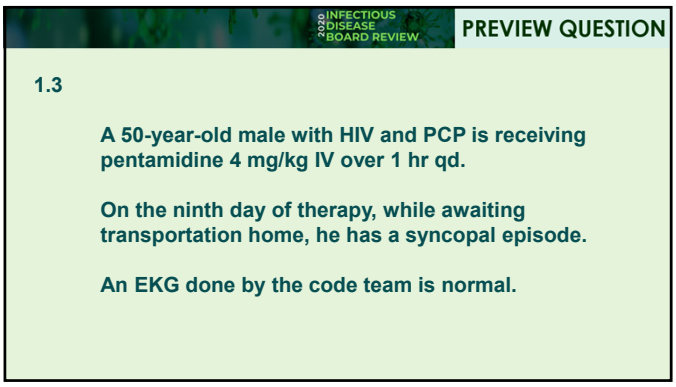












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INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.3

What non cardiac toxicity of pentamidine would be most likely:

A) Hyponatremia

B) Seizure

C) Hypoglycemia

D) Hypertensive crisis and stroke

E) Pulmonary embolus

INFECTIOUS DISEASE BOARD REVIEW 2020

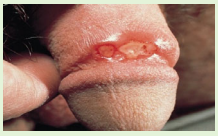
PREVIEW QUESTION

1.4

An 18-year-old man presents with a history of malaise, low-grade fevers, and new-onset painful genital lesions seen in the picture below.

He had unprotected sexual intercourse with a female partner 2 weeks earlier.

Neither he nor his partner has traveled outside the United States.



INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.4

Which of the following diagnostic tests is most likely to yield the specific diagnosis?

A) Serum RPR

B) Serum FTA-Abs

C) Darkfield microscopy

D) Glycoprotein-G 1 serum antibodies

E) PCR on lesion swab

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.5

What complication would you be most concerned about in this patient with zoster involving his ear?

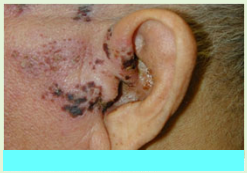
A) Facial paralysis

B) Keratitis

C) Encephalitis

D) Optic neuritis

E) Oculomotor palsies



INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.6

A 67-year-old woman is hospitalized with nosocomial meningitis due to MSSA.

She has a history of allergy to penicillin that is listed in the records as rash; the family recalls that she went to the ED when the rash occurred.

She is not able to corroborate history. She has not received penicillin or cephalosporin antibiotics since the rash occurred a few years ago. Two of her daughters have allergies to penicillin.

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.6

You are asked about optimal antibiotic treatment. What do you advise?

A) Administer nafcillin without prior testing

B) Administer nafcillin after test dose

C) Skin test for penicillin reaction; if negative then administer nafcillin after test dose

D) Administer vancomycin

E) Desensitize to nafcillin

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INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.7

A 43-year-old man with diabetes is hospitalized with a closed tibial fracture.

Three years ago when he was being treated for a foot infection with piperacillin-tazobactam he developed a very itchy rash after several weeks of treatment.

The anesthesiologist calls to ask advice about surgical antibiotic prophylaxis prior to operative fixation.

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.7

What advice do you give?

A) Administer clindamycin

B) Administer cefazolin

C) Administer cefazolin after intraoperative test dose

D) Administer ceftriaxone

E) Administer vancomycin

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.8

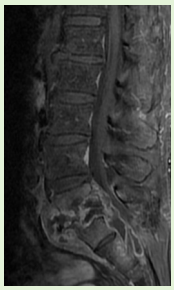
A 57-year-old male presented with a 3-month history of progressive lower back pain.

On ROS he denied fevers or chills but his wife noticed he had weight loss.
Originally the patient was from Cambodia, emigrated as a child.
He is mployed at a seafood processing plant

ESR 84 CRP 16

MRI with discitis and osteomyelitis at L5-S1

Blood cultures grew Staph epidermidis in 2 of 4 bottles



INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.8

What is the best next step in management?

A) Repeat 2 sets of blood cultures

B) Initiate vancomycin; place PICC for six week treatment course

C) Obtain interferon gamma release assay

D) Percutaneous biopsy of disc space

E) Empiric treatment with rifampin, isoniazid, ethambutol, and pyrazinamide

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

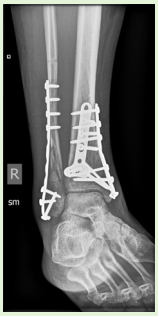
1.9

44-year-old woman, previously healthy, suffered a right ankle closed pilon fracture

- She underwent an open reduction and internal fixation

Impaired wound healing was noted
- Chronically discharging wound despite courses of cephalexin and trimethoprim-sulfamethoxazole

3 months after Open Reduction and Internal Fixation (ORIF), wound culture grows methicillin-susceptible Staph aureus



INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.9

What are your next steps?

A) Nafcillin followed by long-term trimethoprim- sulfamethoxazole

B) Hardware removal; six weeks of oxacillin

C) Hardware removal; six weeks of oxacillin and rifampin

D) Debridement without hardware removal; six weeks of oxacillin and rifampin

E) Debridement and hardware replacement; six weeks of oxacillin and rifampin

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INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.10

A 39-year-old woman is seen on day 4 of hospitalization for high fever and leukocytosis.

The fever had been present for 3 ½ weeks and was accompanied by severe arthralgias of the knees, wrists and ankles as well as myalgias.

A severe sore throat was present during the first week of the illness.

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.10

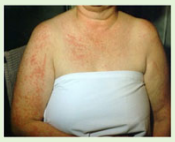
Exam: T=104.2° F.

Tonsilar swelling and erythema is present, with tender cervical LN.

Spleen tip is palpable.

The R wrist is swollen and painful.

A rash present on the trunk and extremities, most prominently under the breasts and in the area of her underwear waistband.



INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.10 Labs:

Ferritin 3600 ng/ml (nl 40-200)
WBC 32,200 (89% neutrophils)
AST and ALT 3x normal
ESR and CRP 5x normal
ANA and RF negative
Throat and blood cultures negative

On afternoon rounds with the attending, the fever resolved with Tylenol and the rash is no longer present.

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.10

The most likely diagnosis is?

A) Lymphoma

B) Adult Still's Disease

C) Acute Rheumatic Fever

D) Cryoglobulinemia

E) Kikuchi's Disease

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.11

A 24-year-old man is referred from the ED for ulcers of the mouth and penis. Three months ago he came to the U.S. from Japan to attend graduate school.

He has a history of intermittent, painful oral ulcers for 3-4 years. Four days ago he developed a painful ulcer on the penile shaft. He recalls a similar lesion 2 months earlier. He takes no medicines and denies sexual contact for the past 5 years.

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.11

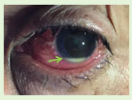
Exam: afebrile

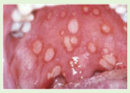
Left eye is inflamed and there is a hypopyon. Numerous ulcers on the oral mucosa.

There is a 0.5cm ulcer on the penis.

A 6mm papulo-pustular lesion is present in the right antecubital fossa; the patient says that is where they drew blood yesterday in the ED

Labs: Hb 12.1; WBC 13,750. HIV negative





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PREVIEW QUESTION

1.11

The most likely diagnosis is?

A) Syphilis

B) Behçet's disease

C) Herpes simplex virus infection

D) Sarcoidosis

E) Cytomegalovirus infection

PREVIEW QUESTION

1.12

A 19-year-old recent immigrant from Iraq is hospitalized for 2 day history of fever and severe abdominal pain.

He says he has had similar episodes on at least 3 previous occasions over the past 7 years.

At the first episode he underwent appendectomy; the removed appendix was normal.
Other episodes resolved spontaneously after 2-3 days.

PREVIEW QUESTION

1.12

Exam:
T 102.2; pulse 114; no rash
Abdominal guarding, rebound tenderness, hypoactive bowel sounds.

Labs:

Hb 12.4; WBC 16,650; UA normal
Basic metabolic panel normal
No occult blood in stool
CT of abdomen and pelvis normal

PREVIEW QUESTION

1.12

The most likely diagnosis is:

A) Hereditary angioneurotic edema

B) Familial Mediterranean fever

C) Systemic lupus erythematosus

D) Crohn's disease

E) Acute intermittent porphyria

PREVIEW QUESTION

1.13

A 63-year-old man with no significant past medical history presents with a week of fever, rigors, and progressive dyspnea on exertion.

Exam : BP 160/40 P110 , 39.5
Rales ½ way up bilaterally
Loud diastolic decrescendo murmur, lower left sternal border
Labs and studies
WBC 23,000 90% PMNS, HCT 30. Platelets 110.
Creatinine 1.6 mg/dl

TTE 1.5 cm oscillating mass, on bicuspid AV with severe aortic regurgitation

3/3 blood cultures: Gram positive cocci in clusters.

PREVIEW QUESTION

1.13

What antibiotic regimen would you recommend pending further information about Gram-positive cocci?

A) Nafcillin

B) Vancomycin

C) Vancomycin + nafcillin

D) Vancomycin + gentamicin

E) Vancomycin + gentamicin + rifampin

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INFECTIOUS DISEASE 2020 BOARD REVIEW

PREVIEW QUESTION

1.14

A 72-year-old man type 2 diabetes mellitus, stage II chronic kidney disease (CKD), and a history of mild aortic stenosis is admitted to the hospital with fever, dysuria, and urinary frequency.

Exam: T38.9oC, Pulse 110 , BP 145/95 mm Hg.
- Lungs are clear
- 3/6 systolic ejection murmur at the right upper sternal boarder.

Lab results
- Serum glucose 340 mg/dl
- Serum creatinine 1.7 mg/dl
- BMP otherwise normal
- UA: 3+ protein, 20-50 wbcs/high power field, 4+ glucose.

Two blood cultures and a urine culture are positive for ampicillin-susceptible Enterococcus faecalis.

INFECTIOUS DISEASE 2020 BOARD REVIEW

PREVIEW QUESTION

1.14

What antibiotic regimen would you recommend for definitive therapy of this patient's infection?

A) Ampicillin for 2 weeks

B) Penicillin + gentamicin for 4 weeks

C) Ampicillin + gentamicin for 4 weeks

D) Ampicillin + ceftriaxone for 6 weeks

E) Daptomycin for 8 weeks

INFECTIOUS DISEASE 2020 BOARD REVIEW

PREVIEW QUESTION

1.15

A 44-year-old man presents with a subjective fever for 3 months, diarrhea for over a year, has lost 30 pounds, and complains of intermittent arthralgias, mainly in his hands.

Exam: BP 172/52 P 92 R 24 T38C
Loud decrescendo blowing diastolic murmur at the lower left sternal border, and rales halfway up bilaterally.

Blood cultures (6 sets): negative after 21 days

Valvular tissue obtained at valve replacement reveals foamy macrophages by PAS stain.

INFECTIOUS DISEASE 2020 BOARD REVIEW

PREVIEW QUESTION

1.15

Which of the following is the most likely etiologic agent?

A) A member of the HACEK group

B) Coxiella burnetii

C) Tropheryma whipplei

D) Bartonella quintana

E) Abiotrophia defectiva

INFECTIOUS DISEASE 2020 BOARD REVIEW

PREVIEW QUESTION

1.16

On day 9 of nafcillin therapy for complicated methicillin-sensitive S. aureus bacteremia a patient has developed new neutropenia (1,000 neutrophils).

MICs (µg/ml) of the blood isolate are:
- penicillin 0.12 (S),
- cefazolin 0.5 (S)
- vancomycin 1 (S)
- daptomycin 0.5 (S)
- ceftaroline 0.5 (S)

INFECTIOUS DISEASE 2020 BOARD REVIEW

PREVIEW QUESTION

1.16

Which one of the alternative agents would you recommend?

A) Penicillin
B) Cefazolin
C) Vancomycin
D) Daptomycin

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INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.17

36-year-old female injection drug user with R hip pain, decreased ROM 2/2 pain; 2/2 blood cultures + for MSSA; CXR, right hip x-ray, CT abdomen and pelvis, MRI, TTE all normal.

She was treated with empirical vancomycin, blood cultures sterile after 1 day of therapy, now on day 5 of nafcillin.

Pain much improved on day 7, but she still uses a cane for ambulation.

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.17

Which one of the following antibiotics would you recommend for a 6 week course?

A) Dalbavancin

B) Ceftriaxone

C) Vancomycin

D) Cefazolin

INFECTIOUS DISEASE BOARD REVIEW 2020

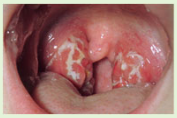
PREVIEW QUESTION

1.18

38-year-old healthy female with 1 day of sore throat and fever.

Childhood history of anaphylaxis to penicillin.

Physical exam
T=102.3
HEENT-tonsillar purulence
Neck-Tender bilateral anterior LAN



Labs:
Rapid strep antigen diagnostic test negative

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.18

What is the most appropriate antimicrobial treatment?

A) Cephalexin

B) None

C) Doxycycline

D) Clindamycin

E) Levofloxacin

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.19

A 42-year-old, previously healthy woman is seen for a bad "sore throat" that began 4 days earlier while attending her sister's wedding in southern Ukraine.

She complains of malaise, odynophagia, and low grade fever.

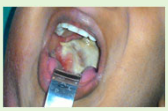
Today, she noted a choking sensation, prompting medical evaluation.

INFECTIOUS DISEASE BOARD REVIEW 2020

PREVIEW QUESTION

1.19

T 100.2F; P 126; BP 118/74.
HEENT: Submandibular swelling
Gray exudate coating posterior pharynx.
An S3 gallop is heard.



CBC is normal.
EKG shows: 1st degree AV nodal block, prolongation, and ST-T wave changes.

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