Pneumonia

MCQS

- In lobar pneumonia, which is NOT true?
- a. Trachea deviated to the opposite side
- b. dullness on percussion
- c. Bronchial breath sound is heard
- d. Presence of whispering pectoriloquy
- e. Late inspiratory crepitations are present
- A 67 year old patient diagnosed as labar pneumonia, in the ED. The patient has a respiratory rate of 32/min, No confusion, a systolic blood pressure of 100 mmHg and a Urea nitrogen of 9 mmol/L. which of the following is TRUE in arterialblood gases?

Select one:

- a. Hypoxemia and hypercaprsen
- b. Hypoxemia and hypocapnea?
- c.Hypoxemia and normal Pac02
- d.Normal PaO2 and hypercapnea e Normal ABG
- One of the followings is a feature of community acquired pneumonia (CAP)?
- a. B-lactam antibiotics are effective in all pneumonias irrespective of causative organism.
- b. Most cases caused by Pseudomonas aeruginosa.
- c. Typical pneumonia usually shows nodular opacity in chest X-ray.
- d. Its clinical signs include a hyperresonant note on percussion and bronchial breath sounds.
- e. Affects a patient not hospitalized for more than 14 days before onset of symptoms.
- Consequences of immobility include which one of the following?
- a. Diarrhea
- b. Maintenance of muscle mass
- c. Urinary retention
- d. Pneumonia
- e. Hastened wound healing

Immobility is independently associated with the development of a series of complications, including pressure ulcer [1], deep vein thrombosis (DVT) [2], pneumonia [3], and urinary tract infection (UTI) [4].

- Which is more often associated with hospital acquired pneumonia than community acquired pneumonia?
- a. Streptococcus pneumoniae
- b. Hemophilus influenza
- c. Legionella
- d. Chlamydia pneumoniae
- e. Mycoplasma pneumoniae
- A 50 year old patient presents with pneumonia, received standard treatment, 4 days later on, developed diarrhea, which of the following organism responsible for this diarrhea?
- a. Campylobacter jejuni
- b. Clostridium difficile
- c. E. coli
- d. Staph. aureus
- e. Enterococcus

The most likely organism responsible for diarrhea following treatment for pneumonia is:b. Clostridium difficileClostridium difficile infection (CDI) commonly occurs as a complication of antibiotic treatment, particularly in hospitalized patients. Antibiotics disrupt the normal gut flora, allowing Clostridium difficile to proliferate and cause diarrhea and other gastrointestinal symptoms. Therefore, in this case, the patient likely developed diarrhea due to Clostridium difficile infection following antibiotic treatment for pneumonia.

- Which of the following statements is not true concerning the management of pneumonia?
- a. Chest X ray is used to confirm diagnosis
- b. Antibiotics therapy should only start once the infecting organism is identified after culture
- c. WBC count 4000 cells/mm3 is a criterion for severe community acquired pneumonia
- d. O2 therapy is commonly used to maintain sao2 90%
- e. Streptococcus pneumonia is the most common cause of community acquired pneumonia
- An adult female present with a sore throat and dry cough . she has had a low grade fever for 3 days. She says her
 colleagues at work have had similar symptom. The CXR is un remarkable. She has a WBC of 14.6/mm3. The provider thinks
 she has community-acquired pneumonia . which of the following would be the best first choice ?
- a) Azithromycin
- b) Ampicillin
- c) Trimethoprim-sulfa
- d) Tetracycline
- e) 3rd generation cephalosporin

• 80 year old patient in hospital develops pneumonia 3 days after hospitalization, what is the treatment : anti psuodomanous beta lactam +anti pseudo quinolone + vancomycin

In a hospitalized patient who develops pneumonia 3 days after hospitalization, the treatment would typically involve empirical broad-spectrum antibiotics to cover potential pathogens, including both typical and atypical bacteria. The combination of an anti-pseudomonal beta-lactam (such as piperacillin-tazobactam, cefepime, or meropenem) along with an anti-pseudomonal quinolone (such as ciprofloxacin or levofloxacin) is appropriate to cover gram-negative organisms. Additionally, vancomycin may be added to cover potential methicillin-resistant Staphylococcus aureus (MRSA) infection.

• Fever , myalgia, headache , dry cough, the causative organism is? Answer: Mycoplasma pneumonia

- Patient with history of cough and sputum with fever and SOB, xray reveals non homogeneous opacity at middle lung, after few days complained of Spontaneous pneumothorax what is most likely organism :
 This is scenario of narcotizing pneumonia >> Staph aurues
- Wrong regarding high risk patient with pneumonia : Respiratory rate is 22
- M.C cause of CAP ...

s.pneumonia

- Common organism cause Community acquired pneumonia ? >>> strep.pnemonia
- Common organism cause pneumonia. In alcoholic. Pt
 >> klebsiella
- Not a complication of mycoplasma pneumonia:
- a. Erythema multiforme
- b. Diarrhea and vomiting
- c. Thrombocytopenia
- d. Leucocytosis
- e. Pericarditis
- MRSA treated by Vancomycin

- All are risk factors for legionella pneumonia, except: ??
- a. Surgery
- b. Tobacco use
- c. Hospital stay
- d. HIV
- e. Steroids

Legionella is an intracellular pathogen that enters the body through aspiration or direct inhalation. Numerous prospective studies have found it is one of the four most common causes of community-acquired pneumonia. Postoperative patients are at risk because of an increased risk of aspiration. Cell-mediated immunity is the primary host defense against Legionella spp., and patients with HIV or those who take glucocorticoids are at risk based on their depressed cell-mediated immune function. Alveolar macrophages phagocytose Legionella spp. Smokers and those with chronic lung disease are at risk given their poor local immune responses and decreased ability for widespread phagocytosis.

- All indicate severity in community acquired pneumonia, except:
- A. Mental score 6/10
- B. WBC 22,000
- C. Age 75 years

CURB-65 score — The British Thoracic Society found a 21-fold increase in mortality in patients who had two or more of the following findings [24]:

- Blood urea nitrogen greater than 20 mg/dL (7 mmol/L)
- Diastolic blood pressure less than 60 mmHg
- Respiratory rate above 30 per minute
- Confusion of new onset (mini *mental score*< = 8)

Which one of the following is LEAST useful in assessing patient with apoor prognosis in community- acquired pneumonia? a-mental confusion

- b- urea of 11.4 mmol/l
- c-positive C-reactive protein
- d- respiratory rate of 35/ min.
- e- age 75 yearsold.

- ONE of the following drugs is most appropriate in treatment of pneumocystis carinii pneumonia.
- a- clarithromycin
- **b- ethambutol**
- c-azithromycin
- d-Trimethoprim-Sulphamethoxazole
- e- INH and rifampicine
- All of the followings are true combination between a risk factor and pathogens causing pneumonia EXCEPT :
- a. Alcoholism and klebsella pneumonia
- b. Old age and mycoplasma pneumonia
- c. Cigarette smoking and H .infleunza
- d. Mechanical ventilation and pseudomonal pneumonia.
- e. Abnormal level of consciousness and anaerobic bacteria

Answer: B (Mycoplasma Young, otherwise healthy patients)

- Pneumocystis carinii pneumonia is caused by:
- a. protozoa
- b. rickettsia
- c. virus
- d. bacteria
- e. none of the above
- Long term outcome in healthy children who survive staphylococcal pneumoniais usually:
- a. recurrent spontaneous pneumothorax
- b. chronic respiratory failure
- c. chronic lung abscess and empyema
- d. persistent pneumatoceles
- e. complete resolution ??
- The most common organism responsible for severe community pneumonia needing ICU care is:
- a. Strep. pnuemonia
- b. Legionella
- c. H. influenza
- d. Gram negative bacilli
- e. Mycoplasama pneumonia

Mini-OSCE

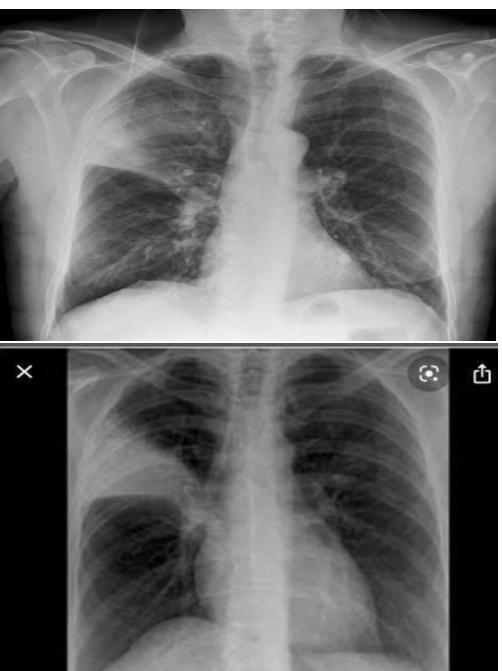
12-This 35 year old librarian came to the outpatient clinic complaining of Fever and cough since 5 days . Your diagnosis is ?

- a. Lung abscess
- b. Lung tumor
- c. Old tuberculosis
- d. Lobar pneumonia
- e. ARDS



Q16 : interpretation for x-ray ?

- Right middle lobe pneumonia
- Right upper lobe pneumonia
- Right upper lobe collapse
- Right middle lobe collapse



Q8) a 24 year old patient complaining of high fever and dry cough for 9 days , 2 days ago he developed dyspnea and <u>hypoxia</u> . a CXR was done for him and gave the following appearance .

what is your diagnosis?

- a) Covid19 pneumonia
- b) Aspiration pneumonia
- c) Lobar Pneumonia

What is presentation of patient?

- a) Low PH, High PCO2, High HCO3, 88% O2
- b) High PH, Low PCO2, Low HCO3, 88% O2
- c) High PH, Low PCO2, Low HCO3, 92% O2
- ((السؤال كان معطي أرقام بدل من عبارات ((Low/High))



The image from Google !!

A 60 years patient came with shortness of breath and fever 38.2



الصورة كانت Middle and lower

Q1 what is the diagnosis?

Right lower & middle lobar pneumonia

Q2 mention 4 investigations you should order?

- 1- gram stain
- 2- sputum culture
- 3- CBC with differential
- 4- blood culture

Station 8

1) What is your diagnosis? Pleural Effusion

List three causes of this condition?
 CHF – pneumonia – malignancy – pulmonary embolism

1) What are other possible findings on the physical exam?

Dullness to percussion – decreased tactile fremitus – decreased breath sounds



Station 9

"Pneumonia"

1) What is your diagnosis?

pneumonia

- 1) List two possible causes?
- S.pneumonia, H.influenza
 - 1) What is the line of treatment? Amoxicillin ,fluroquinol

