Case Study- Chronic bronchitis

Scenario

Mr. O'Connor is a 62-year-old auto mechanic who presents with progressive shortness of breath for the past several days. His problem began four days ago when "I got a cold." His "cold" consisted of a sore throat, rhinorrhea and myalgia. His job forces him to work in the cold and damp air. At first he just felt tired but later he developed a cough and shortness of breath. Initially, the cough was dry but within 24 hours of onset, it produced abundant yellow-green sputum. He states, "I cough up a cup of this stuff every day." He didn't think much of the cough because he continually coughs during the winter of each year. His wife states that he "hacks and spits up" every morning when he gets up from bed. The shortness of breath has worsened so that he can hardly speak now. He also has pain in the left side of his chest when he coughs. He becomes very tired after walking up a flight of stairs or during a coughing spell. He denies hemoptysis, night sweats, chills, and paroxysmal nocturnal dyspnea. However, he does complain of swelling of his ankles: "I've had this for more than a year."Mr. O'Connor has been treated for high blood pressure, pneumonias and infections of his hands. He has been treated for similar episodes of coughing and shortness of breath during the past two years. Once he was hospitalized because "I was drinking too much and my pancreas acted up." A previous doctor gave him nitroglycerin. He smokes 1-2 packs of cigarettes per day and has done so for the past 35 years.

PHYSICAL EXAMINATION: The patient appears much older than he stated age of 62 years. He is a stocky man who appears haggard, tired and anxious. He speaks with difficulty, quickly becoming breathless. There is cyanosis which intensifies during coughing spells. Blood pressure is 146/82 mmHg. Apical heart rate is 96/minute and regular. Respiratory rate is 28/minute. Temperature is 100.2 F.

1. What is Chronic Bronchitis explain patho? a form of COPD inflammation of the bronchi caused by irritant of inhaled for prolonged period of times or infection-Chronic bronchitis is the presence of chronic productive cough for 3 months in two consecutive years in a patient in whom other causes of chronic cough have be excluded.

2. Who is at risk for developing? Anyone exposed to tobacco smoke or air pollution, more susceptible to URI, exacerbations more prevalent in winter.

3. What is the clinical presentation for Chronic Bronchitis? - Productive cough, dyspnea, Cyanosis , use of accessory muscles for breathing, activity intolerance , Pulmonary hypertension caused by involvement of small pulmonary arteries (due to inflammation in the bronchial walls and spasms of pulmonary blood vessels from hypoxia)

4. What would you expect to find on assessment? Productive cough, easily fatigued, dyspnea, leaning forward to breath, use of accessory muscles to breath, hypoxia

5. What diagnostic test would be done? What does this test tell you? Pretty much same as emphysmea

-CXR- may show hyperinflation and increased bronchovascular marking

-PFT- indicates increase residual volume, decreased vital capacity and force expiratory flow and normal static compliance and diffusing capacity

ABG- decreased PA02 and normal or increased PACO2

Sputum culture- may reveal many microorganisms and neutrophil

Pulse ox – decrease in sao2 levels

6. What would you expect treatment to consist of?

- avoid air pollutants and stop smoking if smoker

- Antibiotics

-bronchodilators to relieve bronchospasm and facilitate mucus clearance

Adequate hydration

Corticosteroids to combat e inflammation

Diuretics for edema

O2 for hypoxia

7. What patient teaching you teach pt.? Name at least 3

-Stop smoking being around irritant

- Pulmonary rehabilitation

- Psychosocial considerations

- Importance of early medical treatment upon exerabation

-sleep

8. What do you think brought him to see HCP? Progressive sob for several days “cold” productive cough affecting ADL

9. What are early and late symptoms of hypoxia? - Early – restless, tachycardia, tachypnea, dyspnea, increase agitation, diaphoresis

Retraction altered LOC

Late- increased restlessness, somnolence, stupor, dyspnea, decrease resp rate, bradycardia, and cyanosis

10. Where are the best places to check for cyanosis? Mucus membranes and finger nail beds

11. What is a symptom of chronic hypoxia? - clubbing of digits

12. 2 nursing dx with interventions, and goals.

13. Dietary considerations?

Case Study- COPD

Scenario:

S.W., a 50-year-old Caucasian man, comes to the emergency department with worsening dyspnea, fever, cough, and increased purulent sputum production. He is accompanied by his sister, who says John has been experiencing shortness of breath; feeling fatigued and has not been thinking clearly. His sister states that John has had a cold for the past three days, which he tried to manage with Tylenol. According to past medical history, John has been a smoker for 30 years and has quit one year ago when he was diagnosed with stage II (moderate) chronic obstructive pulmonary disease. He has no other medical conditions, and no known allergies.

Upon physical examination, the nurse notes John's vital signs are:

Blood pressure - 130/84

Respiratory rate - 28/min

Heart rate - 110/min

Oxygen saturation - 87%

Temperature – 100.5

The client is using accessory muscles to breathe, has audible expiratory wheezing and inspiratory crackles, and diminished breath sounds in lower lobes upon auscultation.

1. What is emphysema explain patho?- Irreversible airflow limitations during forced exhalation due to loss of elastic recoil

- Airflow obstruction due to mucous hypersecretion, mucosal edema, and bronchospasm

- Primary process inflammation- inhalation of noxious particles, mediator released cause damage to lung tissue, airways inflamed, parenchyma destroyed tissue destruction causes emphysema

-Supporting structures of lung are destroyed- air goes in but doesn't come out so develops barrel chest, bronchioles tend to collapse

What happens to diaphragm flattens out from years of air trapping.

2. Who is at risk for developing? - Smokers, passives smoke, genetics alpha 1 antitrypsin autosomal recessive – severity depends on which form of the gene was inherited – these patients should not smoke, occupational exposure, Aging??It's unclear dose age lead to copd or cumulative exposures over life time result in copd

3. What is the clinical presentation for emphysema? - Develops slowly- some just think getting older can't do what I use to, Increase in dyspnea, cough, sputum production, chest tightness, wheezing

4. What would you expect to find on assessment? - Barrel chest,- use of accessory muscles with breathing , - Tripod sitting, underweight appearance, - Pursed lip breathing-what is this 2/4- decrease in appetite, - Unexplained weight loss, -prolonged expiration Y?? Do you think they might have some depression and anxiety? What about ADL and everyday life. 5. What diagnostic test would be done? What does this test tell you? - Pulmonary function test- indicate increased residual volume and total lung capacity, reduced diffusing capacity and increased inspiratory flow

-Spirometry

- decrease pulse ox

-ABGS- reduced pao2 normal paco2 until later in dz, and then elevated, as body compensates to maintain a normal ph hco3 rises

CBC- usually shows an increased hgb level late in dz when the pt has persistent sever hypoxia

CXR- in advanced dz show flattened diaphragm

6. What would you expect treatment to consist of? - immunizations

- avoid air pollutants and stop smoking if smoker

- Antibiotics

-bronchodilators to relieve bronchospasm and facilitate mucus clearance

Adequate hydration

Corticosteroids to combat e inflammation

Diuretics for edema

O2 for hypoxia

7. What patient teaching you teach pt? Name at least 3 - Pulmonary rehabilitation - Activity Considerations- Sexual Activity - sleep -Psychosocial considerations - importance of early medical treatment upon exerabation- stop smoking

8. Discharge planning. Include diet consideration, ADL

- Small frequent meals- high calorie, high protein, avoid liquids with meals

- use bronchodilator 1st

-maintain o2

- avoid meals that are gas forming, or excretion 1 hour before and after meals, or meals that requires a lot of chewing to eat

-Flu pneumonia vac current

Along with everything discussed in question 7

9. What about 02 therapy and these patients? - Help with prognosis, quality of life, help with ADL, eating, sleeping positive effects for heart, lung and brain. Humidification, want to try to keep o2 sat > 90% Careful not to give to much- but enough to keep alive- have to remember these pt are used to having high levels of co2 in systems that is what is binded to their RBC. So if you give too much o2 then o2 binds to RBC and they are not use to this so it can decrease their drive to breathe. Sometimes when you intubate these patients it's hard to get them off the ventilator remember who is driving the bus. Co2. In a healthy adult we breathe to blow off co2 we want o2. In copd it is more to low o2 body has to have so they breathe but still remains with more co2 do too hard to breathe out.

10. What do you think brought S.W. to ER? Increase dyspnea fever cough increased sputum, fatigued, change in mental status

11. 2 nursing dx with intervention and goals.

12. Dietary considerations?

Case Study- Community Acquired pneumonia (CAP)

Scenario

The sister of C.K. called to report her 71-year-old brother came down with a fever 2 days ago. Now he has shaking chills, productive cough, and inability to lie down to sleep because “he cannot stop coughing.” C.K. is examined at the hospital’s primary care clinic, is diagnosed (Dx) with community- acquired pneumonia (CAP), and is admitted to your floor. The intern is busy and asks you to complete your routine admission assessment can call her with your findings.

Your assessment findings are as follows: C.K’s VS- 154/82, 105, 32, T103, o2 sat 84% on room air. You auscultate decreased breath sounds in the left lower lobe (LLL) anteriorly and posteriorly and hear coarse crackles in the left upper lobe (LUL). His nail beds are dusky on fingers and toes. He has a productive cough of rust-colored sputum and complains of pain in the left side of chest when he coughs. C.K. seems to be well nourished and adequately hydrated; he is a lifetime nonsmoker and nondrinker. Pas medical history includes CAD, MI x2, with stents x3, Type 2 DM, he had never gotten the Pneumovax or flu shot.

1. What would you include in your assessment/ what would you expect to find?- Assess patient’s oxygenation status with pulse oximetry Perform a focused physical assessment for the following clinical manifestations: Generalized: Fever, restlessness or lethargy; splinting of affected area Respiratory: Tachypnea; pharyngitis; asymmetric chest movements or retraction; decreased excursion; nasal flaring; use of accessory muscles (neck, abdomen) Other focused assessment findings to look for: Respiratory: grunting; crackles, friction rub on auscultation; dullness on percussion over consolidated areas, increased tactile fremitus on palpation; pink, rusty, purulent, green, yellow, or white sputum (amount may be scant to copious) Cardiovascular: Tachycardia Neurologic: Change in mentation, ranging from confusion to delirium

2. What is CAP how is it different from other pneumonias? Occurs in pts who have not been hospitalized or resided in long term care facility within 14 days of onset of symptoms

3. What causes it usually? – streptococcus pneumoniae

4. What diagnostic test do you think the HCP would order? Why?- Diagnosis is based on clinical presentation and chest x-ray. cxr- looking for infiltrates, sputum specimen, gram stain, and C and S, CBC looking wbc’s , blood cultures ? Sepsis, ABG, Bronchoscopy, o2 sats, diminished or adventaous lung sounds

5. What are the clinical signs and systems for this disease process?- Most common

Cough, Fever, shaking chills, Dyspnea, tachypnea, Pleuritic chest pain, Green, yellow, or rust-colored sputum, Change in mentation for older or debilitated patients, Nonspecific manifestations, Physical examination findings, Rhonchi and crackles

6. What would treatment be? - antibiotic's based on the causative agent, humidified o2, bronchodilators, antitussives, high calorie diet with adequate fluid intake, bed rest , analgesic to relieve pleuritic chest pain, - antibiotics even before you know what organism causing

7. What would you include in patient teaching? Discharge planning? - Finish course of antibiotics, adequate rest, and hydration, avoid alcohol and smoking, cool mist humidifier, 6-8 week chest x-ray, pneumonia shot, flu shot rest avoid smoking call if pt gets to feeling worse or becomes sick again.

8. What concerns you with these assessment findings? And why.

9. 2 nursing diagnosis, interventions and goals.

10. Dietary considerations. – Adequate hydration , high calorie small frequent meals

11. What are some complications of CAP? Pleurisy, pleural effusion, atelectasis, empyema, pericarditis, meningitis, sepsis, acute respiratory failure, pneumothorax

Case Study- aspiration pneumonia

Scenario

A 35 year alcoholic male with a history of seizures is admitted with a three week history of fever, generalized weakness, poor appetite, and cough productive of green, foul - smelling sputum. On physical examination, the temperature is 100.3 degrees P. pulse is 96 beats per minute, respiratory rate is 20 breaths per minute, and BP is 120/80 mm. There are many missing teeth with gingivitis and dental caries. He has rales and decreased breath sounds over the right base. Chest x-ray shows consolidation in the superior segment of the right lower lobe.

1. What type of infection is suggested by his foul smelling sputum?

Aspiration can result in aspiration pneumonitis or aspiration pneumonia. Aspiration pneumonitis is an acute, chemical injury caused by inhalation of gastric contents. The amount of damage caused is related to the amount and pH of fluid aspirated: High volumes and acidic pH increase the extent of damage Infection usually does not occur during the early stages of pneumonitis because of the relative sterility of gastric contents. Exceptions include patients with bowel obstruction or gastroparesis and those taking proton pump inhibitor medications. Infection can occur later in the process.

Aspiration pneumonia is an inflammation (usually due to an infection) of your lungs and a bronchial tube that occurs after you inhale foreign matter. It's also known as anaerobic **pneumonia**.- decaying or rotting and emitting a fetid smell. This condition is caused by inhaling materials such as vomitus, food, or liquid. This then leads to a bacterial infection

Triggers inflammatory response- causes noninfectious pneumonitis- then a 2ndary bacterial infection can occur in 48-72 hours

2. What organisms could be responsible for this patient's pneumonia?

50% of patients have only anaerobic organisms, while the other 50% have a **combination of aerobic and anaerobic organisms** with and **anaerobic predominance.**

Anaerobes that are frequently found include:

- Peptostreptococcus sp.
- Bacteroides sp. (B. melanogenicus, B. intermedius)
- Fusobacterium sp.

Aerobes that may be found in predominant anaerobic infection include:

- Microaerophilic streptococci
- Eikenella corrodens
- Pseudomonas aeruginosa
- Staphylococcus aureus
- Enterobacteriaceae

3. Does a normal person aspirate?

No as long as normal gag reflux is intact - 50% of healthy persons aspirate during sleep, usually goes unrecognized, and has few sequelae.

4. What are the clinical signs and systems for this disease process?

- Cough with purulent sputum.
- Fever or chills.
- Malaise, myalgias.
- Rigors may be present of absent.
- Shortness of breath, dyspnea on exertion.
- Pleuritic chest pain.
- Putrid expectoration (a clue to anaerobic bacterial pneumonia

Sudden onset of shaking chills fever, pleuritic chest pain, aggravated by breathing and coughing, tachypnea, respiratory distress, sob, crackles uses accessary muscles, stabbing chest pain, coughing , rapid pulse, poor appetite, HA, pharyngitis, tires easily, may have rusty or blood tinged sputum.

5. What are the other predisposing factors for aspiration? What factor/s predisposed this patient to aspirate?

- Mechanical disruption of the **glottic closure o**r the cardiac sphincter, e.g. (endotracheal tubes, nasogastric feeding tubes, tracheostomy, and pharyngeal anesthesia. Hospital pt

receiving around clock feeding, and coughing up feeding and temp 102 what would you expect?

- **Reduced levels of consciousness** that result in dysfunction of the glottic closure and cough reflex: e.g. ethanol abuse, seizures, drug overdose, general anesthesia, CVA, and metabolic encephalopathy
- **Dysphagia** from neurologic disease or esophageal disease.
- **Periodontal disease and gingivitis** are associated with increased anaerobic inoculum, and are frequently encountered in patients with aspiration pneumonia.
- In about 10% of lung abscess cases, no risk factors are identified.

His alcoholism and seizures probably are the predisposing factors for him. Gingivitis and caries provided a bigger bacterial inoculum for aspiration

6. What diagnostic test do you think the HCP would order? Why?

cxr- looking for infiltrates, sputum specimen, gram stain, and C and S, CBC looking wbc's , blood cultures ? Sepsis, ABG, Bronchoscopy, o2 sats

7. What are the common sites for aspiration lung abscess and why?

The **superior segments of RLL, LLL and axillary sub segments of anterior and posterior segments of RUL** are common sites for aspiration and will account for 85% of all Lung abscesses.
Gravitational forces determine the site of aspiration. Position of the patient at the time of aspiration determines the segment the aspiration is most likely to occur

8. What would treatment be?

antibiotics based on the causative agent, humidified o2, bronchodilators, antitussives, high calorie diet with adequate fluid intake, bed rest , analgesic to relieve pleuritic chest pain,

Help prevent! What would you do if your patient was vomiting – sit up turn to side

Follow rules for tube feedings hold if residual <50 semi flowers for 30mis

9. What would you include in patient teaching? Discharge planning?

Finish course of antibiotics

Adequate rest, hydration, avoid alcohol and smoking, cool mist humidifier, 6-8 week chest x-ray, pneumonia shot

10. 2 nursing diagnosis with interventions and goals.

11. Dietary considerations.

Frequent small meals, high protein diet.

Case Study- Hospital acquired pneumonia

Scenario- will insurance pay?

RP is a 68 year-old male who was admitted to the hospital from his long-term care facility after 1 week of dyspnea and cough. He was seen by a staff physician at the long-term care facility and was diagnosed with a COPD exacerbation. He was prescribed azithromycin, but has not improved after 3 days of antibiotics. He has a history of dyslipidemia, COPD, alcoholic cirrhosis, and HTN. He routinely takes Lisinopril, atorvastatin, tiotropium and fluticasone/salmeterol, and has recently had a heavier reliance on his rescue albuterol inhaler. Review of systems reveals fever, chills, cough (sometimes productive) and dyspnea (worse than baseline). T 101.2, P 89, R24, B/P140/86, O2 sat 84% on room air.

1. What would you include in your assessment/ what would you expect to find? Assess patient's oxygenation status with pulse oximetry Perform a focused physical assessment for the following clinical manifestations: Generalized: Fever, restlessness or lethargy; splinting of affected area Respiratory: Tachypnea; pharyngitis; asymmetric chest movements or retraction; decreased excursion; nasal flaring; use of accessory muscles (neck, abdomen) Other focused assessment findings to look for: Respiratory: grunting; crackles, friction rub on auscultation; dullness on percussion over consolidated areas, increased tactile fremitus on palpation; pink, rusty, purulent, green, yellow, or white sputum (amount may be scant to copious) Cardiovascular: Tachycardia Neurologic: Change in mentation, ranging from confusion to delirium, Vitals – temp up B/p increased, o2 sat low Physical examination- could hear rhonchi and crackles , bronchial breath sounds, Egophony
2. What is HAP how is it different from other pneumonias? - Is pneumonia occurring 48 hours or longer after hospital admission not incubating at the time of hospitalization
3. What causes it usually? - What organisms might be the cause of a hospital acquired aspiration pneumonia? Pt exposed to bacteria from resp devices and equipment 0r transmission by hand of health care workers. – How do we spread it?

Patients with nosocomial aspiration pneumonia are more likely to have a mixed aerobic-anaerobic infection, in which the **aerobic component (gram-negative bacilli) predominates.**

Aerobic organisms:

- Klebsiella, Enterobacter, Serratia, E. coli, Pseudomonas aeruginosa, Staphylococcus aureus

Anaerobic organisms: Peptostreptococcus sp.,Bacteroides sp. (B. melanogenicus, B. intermedius), Fusobacterium sp.

Antibiotics: Drug of choice: Clindamycin + aminoglycoside, Alternative agents: Ticarcillin/clavulanate, or Imipenem, or Piperacillin, or Mezlocillin

4. What diagnostic test do you think the HCP would order? Why?- * cxr- looking for infiltrates, sputum specimen, gram stain, and C and S, CBC looking wbc's , blood cultures ? sepsis, ABG, Bronchoscopy , o2 sats
5. What are the clinical signs and systems for this disease process? - Cough with purulent sputum., Fever or chills., Malaise, myalgia, Rigors may be present of absent., Shortness of breath, dyspnea on exertion., Pleuritic chest pain. Putrid expectoration (a clue to anaerobic bacterial pneumonia)

6. What would treatment be? - antiboidics based on the causative agent, humidified o2, bronchodilators, antitussives, high calorie diet with adequate fluid intake, bed rest , analgesic to relieve pleuritic chest pain,

   What would you include in patient teaching? Discharge planning?- Finish course of antibiotics Adequate rest, hydration, avoid alcohol and smoking, cool mist humidifier, 6-8 week chest x-ray, pneumonia shot

7. 2 nursing diagnosis, interventions and goals.
8. Dietary considerations.

Case Study- TB

Scenario

You are a public health nurse working at a county immunization and tuberculosis (TB) clinic. B.A. is a 61 yr. old female who wishes to obtain a food handler's license and is required to show proof of a negative Mantoux (purified protein derivative (PPD) test before being hired. She came in your clinic 2 days ago, to obtain a PPD test for TB. She has returned to have you evaluate her reaction.

B.A. consumes 3-4 ounces of alcohol per day and has smoked 1.5 packs of cigarettes per day for 40 years. She is a native-born American, has no risk factors according to the CDC guidelines, lives with her daughter, and becomes angry at the suggestion that she might have TB. She admits that her mother had TB when she was a child but says she has never tested positive. She says, I feel just fine and I don't think all this is necessary."

1. What is TB and what microorganism causes it, main organ it affects? (Why does it like this organ?) Mycobacterium tuberculosis, lungs TB loves the oxygen can effect kidney, bones, brain, adrenal glans

2. What is the route of transmission for TB? Is it easily transmitted? Usually spread from person to person via airborne droplets produced by breathing, talking, singing and coughing—very small so remain suspended in air for minutes to hours – transmission usually requires close,

frequent, or prolonged exposure – 70% of immunocompetent adults infected with TB are Able to completely kill the mycobacteria

3. Who is at high risk for developing it? Homeless, residents of inner-city neighborhoods, foreign-born persons living or working in institutions (including health care workers), iv injecting drug users, poverty, poor access to health care, immunosuppression, Asian descent- travel to a area where TB is prevelent

4. Discuss the different classification of TB, i.e.: Primary, latent, active, military.

> **Primary infection** occurs when the bacteria are inhaled and initiate an inflammatory reaction we usually encapsulate organisms for the rest of their live, preventing primary infection from progressing to dz, when a active disease develops within the first 2 years of infection, it is termed primary TB
>
> **Latent TB infection**- is a TB infection in a person who does not have active TB dz. These individuals are asymptomatic and cannot transmit the TB bacteria to others. An estimated 10-15 million Americans have LTBI, of with 5-10 % will develop active TB dx at some point. Treatment is important.
> **Active TB**- if the body cannot contain the organisms, the bacteria replicate and active TB results. **Post- primary or reactivation TB**, is defined as TB dx occurring 2 or more years after the initial infection. Individuals co-infected with HIV are at greatest risk for developing active TB
> **Miliary TB**- is the widespread dissemination of the mycobacterium; bacteria are spread via the blood stream to distant organs. The infection is characterized by large amount of TB bacilli and may be fatal if left untreated

5. What is the preferred method for TB screening? How would you know if it is a positive or negative result? Tuberculin skin test-(PPD) intradermal read in 48-72 hours for induration not redness usually takes 2-10 weeks past exposure to be +

6. What are clinical presentations for TB? (Signs and Symptoms)- Late and Early disease. - Depends on organ effected rt? But concentrate on lungs- initial dry cough that becomes productive and frequent, fatigue, malaise, anorexia, unexplained weight loss, low grade fever, night sweats, generalized flulike symptoms, pleuritic pain, late dyspnea and hemoptysis

7. What additional information would you want to obtain form B.A. before interpreting her skin test results as positive or negative? - Where does she live, immunocomprised, where was they born, drug use hx, exposed to her knowledge?

8. What diagnostic studies would be ordered and why?

- Interferon –Y release assays very expensive Bld test very expensive

- Chest x-ray – usually in upper lobes of lungs cannot make diagnosis solely on chest x-ray
- Sputum culture usually for 1-3 consecutive days (how do we collect and when)

9. How do you determine whether the test is positive or negative? What is consider positive in a healthy adult? What about immunocompromised?

Positive if greater or equal to 15mm in low risk individuals, immune compromised pt greater or equal to 5mm, high risk individuals 10mm- a diminished immune response can cause false negative result

10. You measure and note that the area of erythema measured 30mm in diameter and are of induration is measures 16mm in diameter. Determine whether B.A.'s skin test is positive or negative? Once positive always positive usually does not effect WBC

11. What does a positive PPD result mean? - - That you have been exposed to TB bacteria

12. How would you determine whether B.A. has active T.B? - Sputum culture, CXR, sputum confirms – slow growing hard to tell on x-ray just says something is there

13. What is multidrug resistant TB? How can you ensure pt. takes Rx?

MDR_TB occurs when a strain develops resistance to two of the most potent first- line anti TB drug

Resistance results from several problems, including incorrect prescribing, lack of public health case management and pt non adherence to prescribed the regime.

Nonadherence to drug therapy is major problem that leads to treatment failure, drug resistance, and continued spread of TB. Has to be on medication a long time.

- have pt come to clinic or community site to get meds daily, have nurse go by and give, teach, remember who is your high risk population.

14. When are they no longer considered contagious? 2-3 weeks after treatment is started – they should restrict visitors, travel on public transportation, and trips to public places – If PPD is negative in a suspected TB pt what kind of precautions should nurse take- standard and airborne - S/S improving means rx is working

15. Do all TB patients require hospitalization? If in the hospital what kind of isolation? What kind of mask has to be wore? Who wears mask is patient is out of their hospital room? No most patients with TB are treated on an outpatient basis- hospitalization is not necessary for most patients – hospitalization may be needed for the severely ill or debilitated

Airborne isolation – single occupancy room with negative pressure and airflow of 6-12 per hour.

High efficiency particulate air mask are worn must have a fit test.

Pt

16. Do we have to notify the health department when a patient test positive for TB? What are they going to do for patient and community? YES! Individuals with a diagnosis of TB must be reported to public health authorities for identification and assessment of contacts and risk to the community. They will get a list of all contacts and encourage testing for them.

17. What patient teaching should you include? Discharge planning

- Cover nose and mouth with tissue when coughing sneezing or producing sputum, hand washing, dispose of soiled tissues

- need for monthly sputum cultures

- How to minimize exposure to other

- are they going to be able to adhere to treatment- even if case management have to arrange to have pt go to community center and get rx daily

Patients that have responded clinically can go home with + culture if their household contacts have already been exposed and the pt is not posing a risk to susceptible person

Teach how to minimize exposure to close contacts and house hold members. Homes should be well ventilated, pt should sleep alone, spend time outdoors, minimize time in congregate setting or public transportation.

IMPORTANCE OF COMPLIANCE

Teach s/s of recurrence about 5 % relapse

Smoking cessation

Tell them a public health nurse will be responsible for follow up on household contacts and assessment of pt for compliance

Teach that pt considered adequately treated when the therapy regimen has been completed and there is evidence of neg cultures, clinical improvement and cxray improvement.

Things that can reactivate TB – immunosuppressive therapy, malignancy, prolonged debilitating illness.

18. What would B.A, have to have from now on instead of a skin test? Chest X ray

19. 2 nursing diagnosis, interventions and goals.

20. Dietary considerations?