

WEEK 4 Nur-641E DISCUSSIONS

Topic 4 DQ 1

Aug 8-10, 2024

Choose a medical condition from the respiratory system or HEENT system and explain the pathophysiological changes that may occur. What patient education would need to be included relating to this disorder? Make sure that you select a different medical condition than your peers. Include the name of the medical condition (bolded) above your answer so that the medical condition can easily be identified. Cite your references in APA style.

Acute Bronchitis

Acute Bronchitis is inflammation of the trachea and bronchi is produced most “(80% of the 12 million cases per year in the United States) by a variety of viruses such as influenza virus A or B, parainfluenza virus, respiratory syncytial virus (RSV), coronavirus, rhinovirus, Coxsackie virus, and adenovirus. Nonviral causes include Streptococcus pneumo-niae, Haemophilus influenza, mycoplasma, moraxella, and Chlamydia pneumoniae” (Banasik, 2022). There are other causes such as heat, smoke, chemicals, and allergic reactions can cause acute bronchitis.

Pathophysiology: Acute Bronchitis is caused after the airways have narrowed. The narrowing happens due to swelling from drainage, mucus, inflammation, and dilated capillaries. Several different “viruses and mycoplasma bacteria” temporarily inhibit macrophages and lymphocytes which allow secondary bacteria. These microorganisms can induce long-lasting hyperirritability of the respiratory system. This can be associated with bronchospasm (Banasik, 2022).

Patient Education: Patients need to understand that treatment will be dependent on symptoms and whether the acute bronchitis is viral versus bacterial. When bronchitis is viral, symptoms will resolve spontaneously and do not need antibacterial treatment. When acute bronchitis turns bacterial, antibiotics are recommended. Patients should be treated with basic over-the-counter antitussive agents, fluids, rest, and avoid smoke or other inhalation irritants. Some patients may need bronchodilators and prescribed codeine for cough. Patients should be vigilant if they are elderly or are immunocompromised. Acute bronchitis can turn bacterial or into a more serious respiratory issue such as pneumonia (Banaski, 2022).

Banasik, J. (2022). *Pathophysiology E-book* (7th ed.). Elsevier Health Sciences.

Topic 4 DQ 2