

Nursing Significance

The legal and ethical responsibilities of a nurse in treating a patient with Churg-Strauss Syndrome are to: Monitor their eosinophil levels, monitor their vital signs in case of fever or asthma signs occur, administrate medications every day to help with management of their disease, and make a nurse relationship by communication to help alleviate fear within the patient and family. If the incidence of the disease was to occur, it will impact nursing by first education about the disease since its rare now and not much is known, more patients may be coming in with complications such as heart attacks, medications would be more in demand and harder to find, and an increase in patient safety and teachings would be needed to promote their wellness. Health care in general would be affected by an increase as well since many people are not aware of the disease, so there is risk for inadequate health care service.

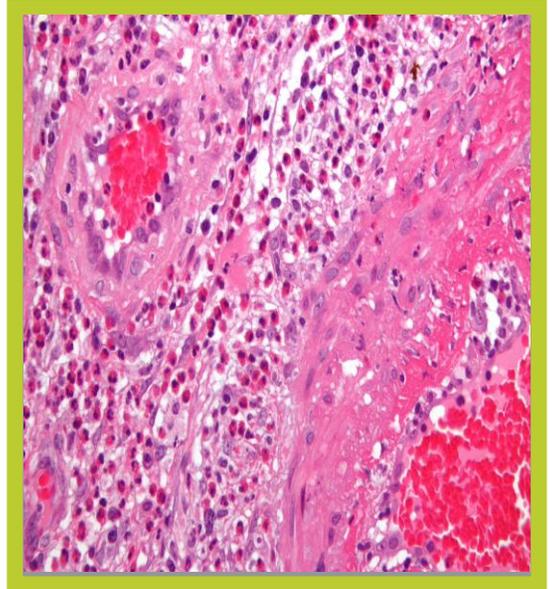
Other health care providers involved in a patient with Churg-Strauss Syndrome would be physicians, nurses, nurse aids, respiratory therapist, cardiologist, neurologist, and dermatologist. Psychologists may also be in the care if patient has increased anxiety and worry about their health, life, and family.

NCLEX Questions

- 1)A patient is diagnosed with Churg-Strauss Syndrome. What type of white blood cell is involved in this disease?
 - a. Neutrophil
 - b. Monocyte
 - c. Eosinophil
 - d. Basophil
- 2)A patient is diagnosed with Churg-Strauss Syndrome. Which of the following would the nurse expect to find in the patients history?
 - a. Anemia
 - b. Severe Asthma
 - c. Leukemia
 - d. Hypertension

References

- Churg-Strauss Syndrome. (2012). *Mayo clinic*. Retrieved from <http://www.mayoclinic.com/health/churg-strauss-syndrome/DS00855>
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- Wechsler, M., Blonshine, S., Kelly, H., & Goerge, M. (2001). Churg-Strauss Syndrome: A clinical update. *Meniscus*. Retrieved from <http://www.meniscus.com/css/css.pdf>.



Churg-Strauss Syndrome

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About Churg-Strauss Syndrome:

Pathophysiology

Over-activation of eosinophil's infiltrate tissues mainly blood vessels. The blood vessels become inflamed and restrict blood flow to vital organs and tissues. After prolonged periods of time, necrosis occurs from the lack of blood flow.

Etiology

Unknown

-However: Believed to be an autoimmune process because of its allergic features and presence of immune complexes (heightened T cell immunity) and altered humoral immunity (elevated IgE and rheumatoid factor).

Risk Factors

- History of severe asthma
- History of nasal allergies
- Chronic sinusitis
- Medication use (low-high dose of oral system steroids or inhaled steroids).

Incidence

RARE: 2-4 diagnosed per 1 million people.

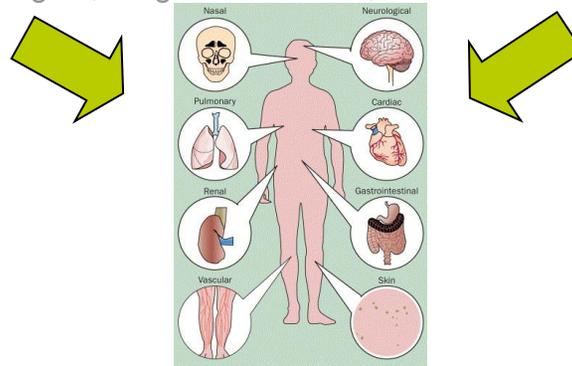
Culture Significance

Large prevalence in Whites over all races.

Clinical Manifestations

-Churg-Strauss has three stages that signs and symptoms develop but not all stages have to occur.

- 1) **Allergic Stage:** Asthma, allergic rhinitis, and sinusitis.
- 2) **Eosinophil Stage:** Fever, weight loss, fatigue, night sweats, cough, abdominal pain, and GI bleeding. These can occur for days to years.
- 3) **Vasculitic Stage:** Skin rash, joint aches/pains, severe pain/ numbness/ swelling in hands and feet, nausea, vomiting, diarrhea, dyspnea, hemoptysis, angina, irregular heartbeat, and hematuria.



Complications

- Scarring of skin- from rash.
- Peripheral nerve damage such as numbness, burning, and loss of function in hands and feet.
- Pericarditis, heart attack, heart failure, or glomerulonephritis- from the constant inflammation.
- Kidney Failure- from effects of inflammation.
- Death- following complications.

During the life-Span:

The disorder does not affect men or women more than the other. Children rarely are diagnosed with disease but will start with stage 1 by usually getting diagnosed with asthma. Adults are mainly affected, due to the time of diagnosis becoming clear at this age (Mean diagnosis is 48 years old). Older adults that were diagnosed with the disease may be diagnosed with many of the complications such as heart attack.

Nursing Diagnosis:

- 1) Acute pain r/t peripheral neuropathy especially in the vasculitic stage.
-Outcomes for this patient would be management of inflammation with their corticosteroid prescription. The patient should also manage pain with an analgesic when present and intense.
- 2) Death anxiety r/t necrosis of blood vessels, tissues, and organs.
-Outcomes for the patient would be for them to meet with the doctor and confess her concerns. Patient should also follow up with tests of tissues and organs making sure they are performing well and have no abnormality.
- 3) Readiness for enhanced therapeutic regimen management r/t treatment of inflammation of blood vessels.
-Outcomes for this patient would be to attend their doctor for a prescription of corticosteroids. Check-ups for effects of medicine should be routine and check of eosinophil levels.