C

Collagen Vascular Disease

Elliot J. Roth

Feinberg School of Medicine, Physical Medicine and Rehabilitation, Northwestern University, Chicago, IL, USA

Synonyms

[Connective tissue disease](#)

Definition

Collagen vascular diseases are a group of conditions that are characterized by malfunction of the tendons, bones, and connective tissue, that are supported by collagen. Their pathogenesis is autoimmune in nature.

Current Knowledge

The most common collagen vascular disorders include rheumatoid arthritis, systemic lupus erythematosus, scleroderma, and dermatomyositis. Others include polymyositis, polyarteritis nodosa, ankylosing spondylitis, and a number of vasculopathies. These diseases are frequently

associated with diffuse inflammatory changes, abnormal immunity. Vascular abnormalities that result from these conditions serve as frequent causes of various types of vasculitis. Common features include arthritis, skin changes, eye changes, pericarditis, pleuritis, myocarditis, nephritis, and vasculitis of the brain, peripheral nerves, or extremities. They also may have a variety of hematological changes causing clotting or bleeding and a number of abnormal circulating blood proteins.

The cause of most of these diseases is unknown. Hereditary factors and deficiencies, autoimmunity, environmental antigens, infections, allergies, and antigen-antibody complexes in various combinations are probably involved.

Cross-References

- ▶ [Cerebral Angiitis](#)
- ▶ [Lupus Cerebritis](#)
- ▶ [Vasculitis](#)

References and Reading

Klippel, J. H., Stone, J. H., Crofford, L. J., & White, P. H. (Eds.). (2008). *Primer on the rheumatic diseases* (13th ed.). New York: Springer.