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Commentary

Most Effected Organs with Amyloidosis Disease

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DESCRIPTION

Amyloidosis is a condition that prevents normal bodily function by depositing an aberrant protein called amyloid in the body's connective tissues and organs. When ordinarily soluble proteins like antibodies are misfolded and fibril structure, amyloid, a fibrous, insoluble protein-carbohydrate combination, develops. The main protein component that each variety of amyloid possesses allows us to distinguish it from the others.

The rare and diverse group of illnesses known as amyloidosis is defined by the buildup of improperly folded proteins in tissues, which can eventually result in organ damage. Because of their affinity for Congo red and their yellow-green birefringence under polarized light, the deposits, which are primarily extracellular, may be identified. The amyloid protein type is the basis for the current classification of amyloid in medical practice. There are now 36 proteins known to cause amyloid in humans.

Amyloidosis comes in a variety of forms that can be categorized as primary, secondary, or inherited. Rarely, primary systemic amyloidosis develops without an underlying illness. Skin abnormalities (including coloring and nodule formation), heart failure, renal failure, enlargement of the spleen and liver, and kidney failure are among the symptoms that frequently manifest in the fifth or sixth decade of life. The aberrant generation of antibodies in the bone marrow is linked to this type, despite the fact that its etiology is uncertain. Since these antibodies are unable to be broken down, they enter the bloodstream and eventually deposit as amyloid proteins in other tissues.

Amyloid proteins can be found in the blood or urine, and the condition can also be identified by tissue biopsies and imaging tests that look for amyloid deposits inside organs. The goal of treatment is to lessen symptoms. Anti-inflammatory medications like prednisone and colchicine are frequently used for treating primary amyloidosis, and some patients may also receive treatment with the chemotherapy drug melphalan. The surgical excision of amyloidic masses may be used to treat limited disease types. Treatment for secondary amyloidosis focuses on reducing organ damage brought on by the underlying condition. In patients with advanced amyloidosis, transplants for the liver, heart, or kidneys or dialysis may be necessary.

Symptoms

- Amyloidosis symptoms and signs can include:
- Extreme weakness and weariness
- Breathing difficulty
- Tingling, numbness, or discomfort in the hands or feet
- The legs and ankles becoming swollen
- Constipation or maybe bloody diarrhea
- A protruding tongue that occasionally appears to have ripples on its margin
- Purplish patches under the eyes and thickening or easy bruising of the skin are examples of skin alterations.

Complications

Heart: The heart can sustain substantial harm from amyloidosis. The capacity of the heart to fill with blood in between heartbeats is decreased by amyloid. With each heartbeat, less blood is pumped. Breathing difficulty may result from this. Amyloidosis can lead to issues with heart rhythm if it interferes with the electrical system of the heart. Heart issues caused by amyloid can become fatal.

Kidneys: The kidneys' filtering system may be harmed by amyloid. Their capacity to eliminate waste from the body is impacted by this. Kidney failure may eventually result from it.

System of nerves: Pain, numbness, or tingling in the fingers and feet might be brought on by nerve injury. Amyloid can bring on spells of alternate constipation and diarrhea if it disrupts the nerves that regulate bowel movement. People who suffer from blood pressure nerve damage may experience dizziness if they stand up suddenly.

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