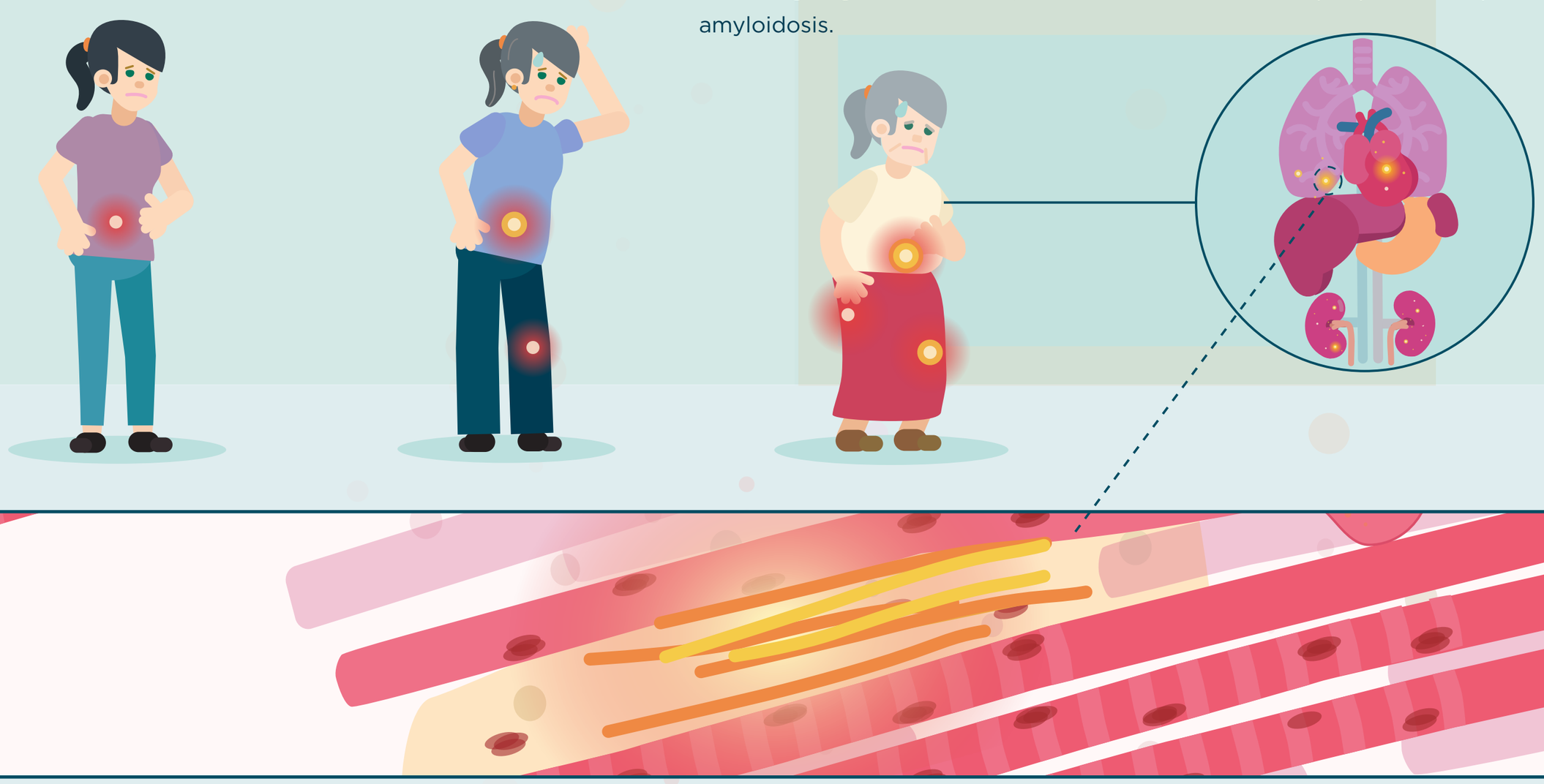
AA AMYLOIDOSIS

Understanding a rare but serious condition

September 2025

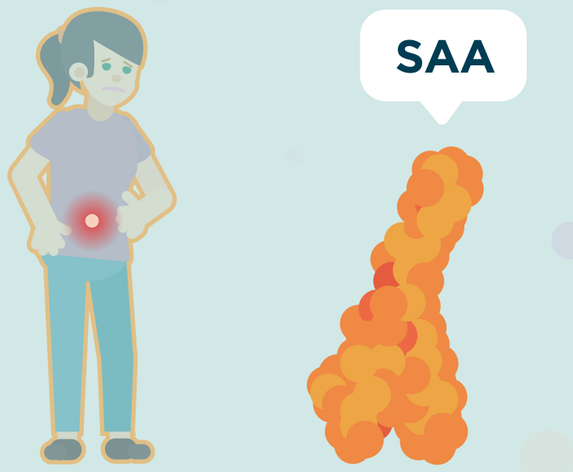
WHAT IS AA AMYLOIDOSIS?

AA amyloidosis is a rare disease that happens when a protein called serum amyloid A (SAA), made by the liver during inflammation, breaks down and leaves behind abnormal deposits in tissues and organs. These deposits, called AA amyloid fibrils, can build up in organs over time and cause damage, especially if inflammation lasts a long time. Even though many people live with ongoing inflammation, less than 5% of these people develop AA amyloidosis.



HOW DOES AA DEVELOP?

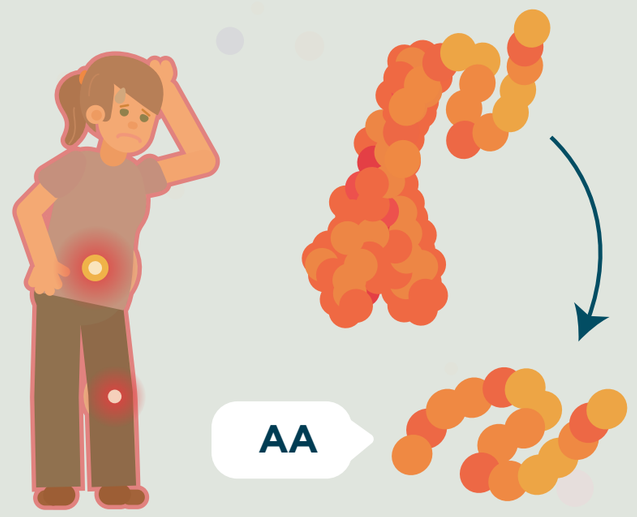
HEALTHY INDIVIDUALS



▲ Inflammation → ▲ SAA

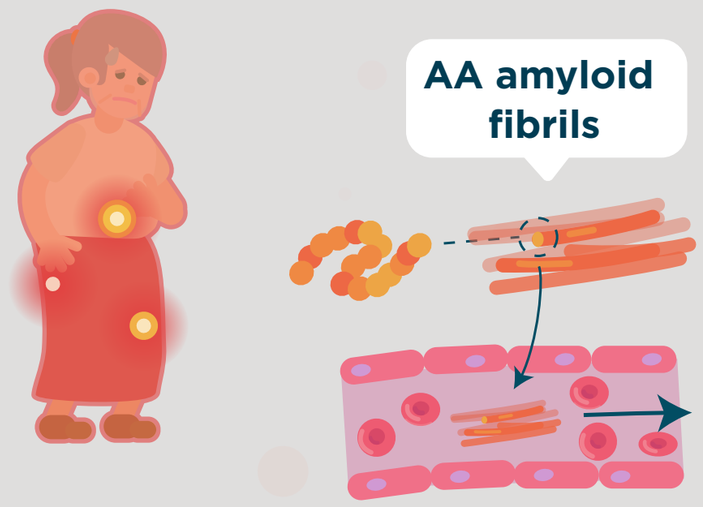
When the body experiences inflammation (like from illness or injury), the liver makes a protein called SAA. Once the inflammation goes away, the body usually breaks down and clears out the SAA protein.

PROLONGED INFLAMMATION



In some cases, if inflammation is severe or long-lasting, part of the SAA protein, called AA, breaks off and does not clear properly. Instead, it builds up in the body.

PATIENTS WITH AA



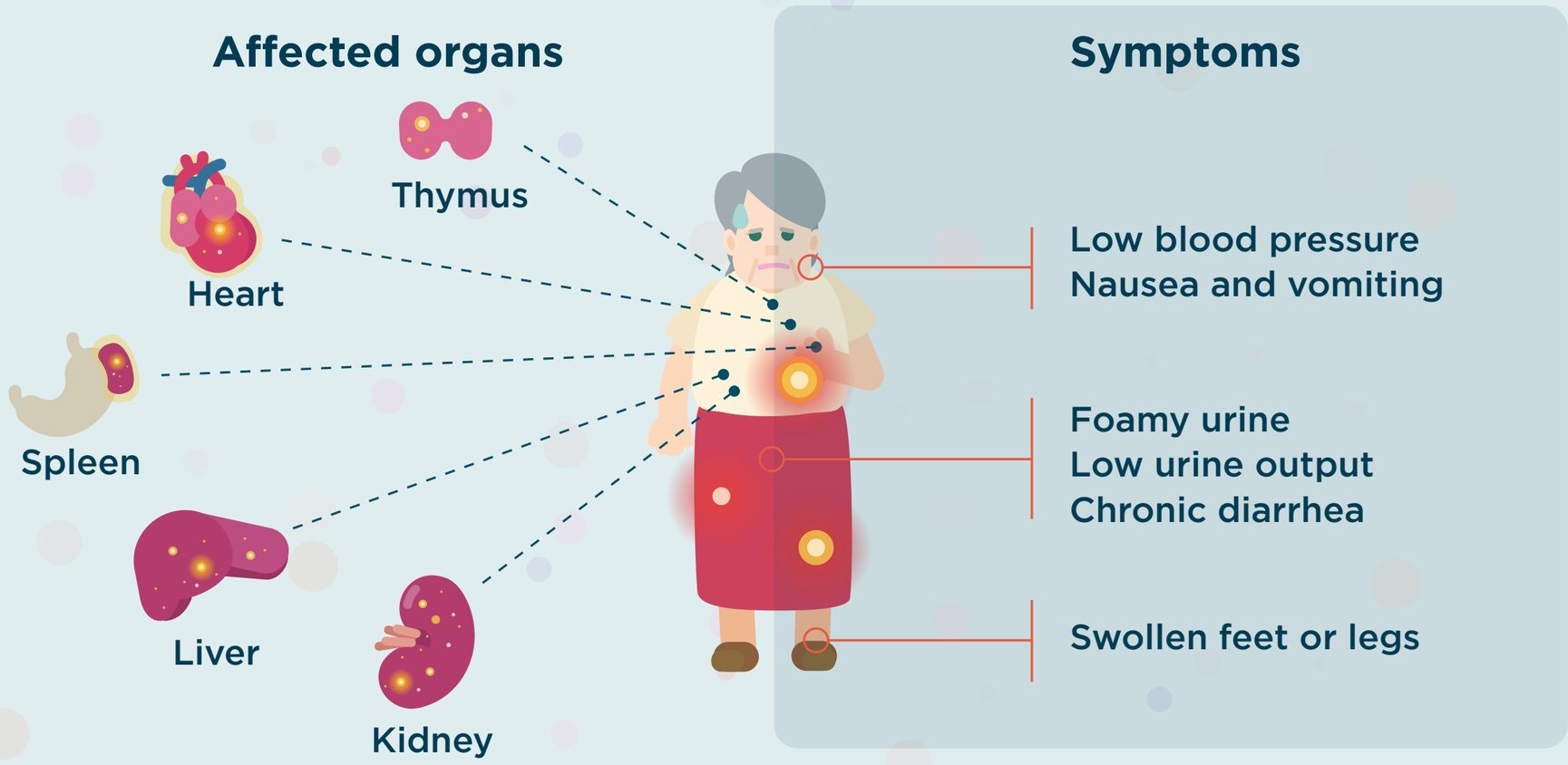
These AA fragments form amyloid fibrils that build up in tissues and organs - most often in the kidneys - causing damage that gets worse over time.

WHAT CAUSES AA AMYLOIDOSIS?

AA amyloidosis is caused by long-term inflammation in the body. This inflammation can come from many different health conditions, including:

- Autoimmune and rheumatic diseases (e.g., rheumatoid arthritis, lupus)
- Chronic infections (e.g., tuberculosis, osteomyelitis)
- Blood cancers (e.g., lymphoma, multiple myeloma)
- Inflammatory bowel diseases (e.g., Crohn's disease, ulcerative colitis)
- Inherited autoinflammatory syndromes (e.g., Familial Mediterranean Fever)

In about 1 out of every 4 cases, the exact cause of the inflammation cannot be found. This can make diagnosis and treatment more difficult.

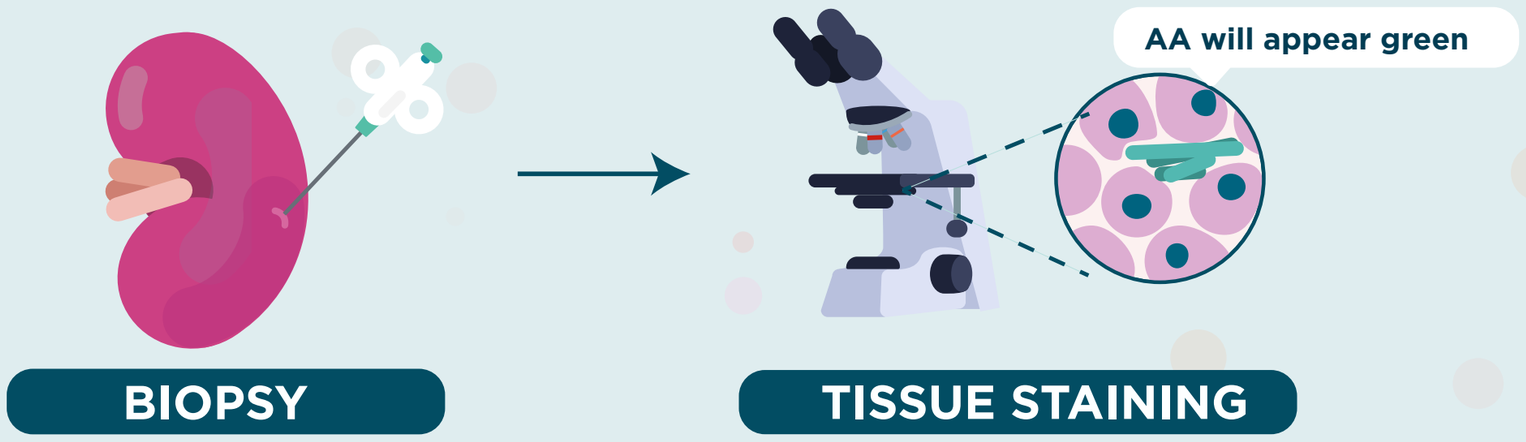


DIAGNOSIS

To confirm a diagnosis of AA amyloidosis, a biopsy (small tissue sample) is required. The biopsy is typically taken from the affected organ, most often the kidney, but can also be taken from abdominal fat (known as a "fat pad" biopsy) or other tissues. Once confirmed, doctors will use blood tests to measure the level of inflammation in the body, including:

- EST (erythrocyte sedimentation rate)
- CRP (C-reactive protein)
- SAA (serum amyloid A)

Further tests may be needed to identify the underlying condition causing inflammation. These may include blood tests, genetic testing, imaging, and screening for infections or cancers.



PREVENTION AND TREATMENT

The best way to prevent AA amyloidosis is by identifying and treating the cause of long-term inflammatory conditions as early as possible. This may include:

- Immunosuppressive or biologic medications for autoimmune diseases like rheumatoid arthritis
- Antibiotics for chronic infections such as tuberculosis
- Targeted therapies for blood cancers or inherited autoinflammatory diseases

The main goal of treatment is to lower SAA levels in the blood by controlling the cause of inflammation. Reducing inflammation helps prevent further amyloid build-up and may slow or reverse organ damage. For patients with advanced kidney involvement, kidney transplantation may be considered if the underlying inflammation is well controlled.

WORKING TOGETHER TOWARD BETTER OUTCOMES

Early recognition and management of AA amyloidosis are essential. Patients and caregivers play a key role by partnering with healthcare providers, attending regular appointments, and staying engaged in treatment plans. AA amyloidosis is a complex condition, but with appropriate care and early intervention, health can significantly improve. ARC's contact info below.

Amyloidosis Research Consortium

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