

Understanding Wild-type ATTR (wtATTR) Amyloidosisi

Wild-type ATTR (wtATTR) amyloidosis is one of the two main types of ATTR amyloidosis the other being hereditary (hATTR) amyloidosis.

Unlike the hereditary form, wtATTR amyloidosis is not caused by a genetic mutation.

What is wtATTR amyloidosis?"



Transthyretin (TTR) protein is made naturally in the liver





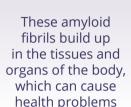
In wtATTR amyloidosis, the TTR protein

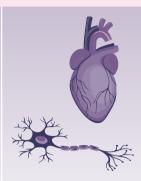
misfolds and starts to bind together

to form amyloid fibrils







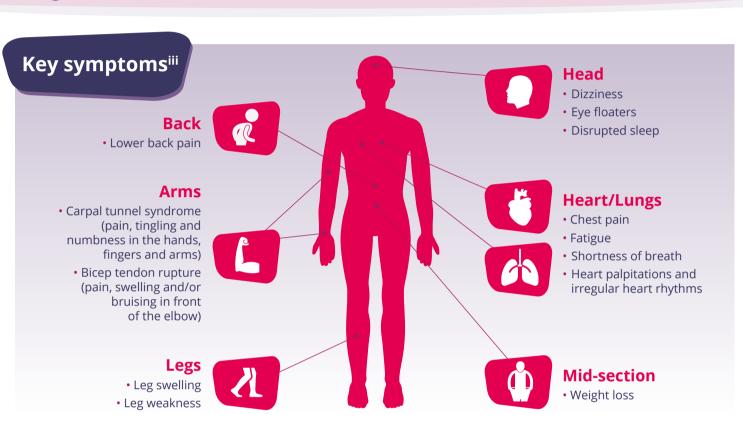


These deposits are most commonly found in the heart and nerves



Can I pass it on to my children?

No. As far as we know, unlike hereditary ATTR amyloidosis, there is no genetic link to wtATTR amyloidosis.



Diagnosis

• Symptoms often resemble other, more common conditions, so it can take a long time to be diagnosed. Common tests include:



Testing a sample of body tissue (biopsy)



Genetic tests



Imaging, such as cardiac magnetic resonance (CMR)

More common than previously thought?



Diagnostic tests have greatly improved detection of amyloid in the heart, and this has led to belief that wtATTR amyloidosis may be far more common than previously thought. Cardiologists are gradually becoming more aware that ATTR amyloidosis may cause unexplained heart failure, but many patients remain undiagnosed.

Treatment

- · While positive advances have been made and new treatment options are emerging, there is not currently a cure for wATTR amyloidosis.
- Treatment usually aims to slow or prevent production of the abnormal TTR proteins, and can include:



Stabilising production of the TTR protein preventing TTR proteins becoming

amyloid deposits



Making existing amyloid deposits smaller limiting further damage to organs



Stopping production of the TTR protein blocking the TTR gene to prevent the protein being produced



Alleviating symptoms to improve quality of life

The National Amyloidosis Centre (NAC)

Patients with suspected or diagnosed ATTR amyloidosis should be assessed by a specialist unit. In the UK, the NHS National Amyloidosis Centre (NAC) at the Royal Free Hospital, London, will be where most people are referred to for specialist help.

References

- i Wild-Type Amyloidosis. Amyloidosis Research Consortium. Available at: https://arci.org/about-amyloidosis-old/wild-type-amyloidosis/. Last accessed: June 2021. ii Amyloidosis: ATTR (transthyretin). Cleveland Clinic. Available at: https://my.clevelandclinic.org/health/diseases/17855-amyloidosis-attr.
- Last accessed: June 2021. iii Wild-type ATTR. Amyloidosis Foundation. Available at: https://amyloidosis.org/facts/wild-type/. Last accessed: June 2021