

Renal amyloidosis

Renal amyloidosis is the deposition of proteinaceous substances (deposits) in the mesangium along the glomerular basement membrane. We classify renal amyloidosis as the secondary glomerulonephritis. We have to mention that amyloidosis is a **systemic disease** - amyloid is stored throughout the body. Renal damage caused by amyloidosis manifests itself as a **nephrotic syndrome** (mainly dominated by proteinuria), gradually progressing to renal insufficiency. The disease includes non-specific manifestations such as fatigue, weakness, weight loss.



Primary amyloidosis AL

Primary amyloidosis AL occurs in diseases such as **MGUS** (monoclonal gammopathy of unclear significance), myeloma, Waldenström's macroglobulinemia, CLL, lymphomas. Usually, light chain (lambda) fragments are deposited. Less common are deposits of heavy chain (kappa) fragments, sometimes referred to as amyloidosis AH (**heavy** chain). **Other organ disorders:** GIT, heart (significantly worsens the prognosis), peripheral nerves, macroglossia, carpal tunnel syndrome.

Therapy:

- Conservative: **melphalan** in combination with **prednisone**,
- Causal treatment: **bone marrow transplantation**.

The prognosis of untreated AL amyloidosis is poor (12 months). Due to the nature of the disease, it is necessary to screen for organ involvement (heart echo, kidney biopsy, trepanobiopsy).

Secondary amyloidosis AA

The so-called reactive amyloidosis, occurs in chronic inflammatory diseases (rheumatoid arthritis, ankylosing spondylitis, bronchiectasis, osteomyelitis, juvenile arthritis). AA amyloidosis mainly affects the kidneys and GIT (hepatosplenomegaly, diarrhea-malabsorption).

Therapy:

- by treating the underlying disease, we achieve the remission of nephrotic syndrome.

References

Related articles

- Amyloidosis
- Kidney
- Glomerulopathy manifested by nephrotic syndrome
- Secondary renal amyloidosis
- Dialysis amyloidosis

References

- RYŠAVA, Romana. *Secondary glomerulonephritis* [lecture on the course Nephrology, branch of General Medicine, 1.LF Charles University in Prague]. Prague. 2011-01-07.