

# Waldenström's macroglobulinemia

In essence Waldenström's macroglobulinemia is a malignant mutation of B-cells, and its proliferation and differentiation into lymphoplasmocytic cells producing monoclonal immunoglobulin IgM. It is 10 times less common than multiple myeloma. It is one of the diseases called monoclonal gammopathy.

## The clinical picture

- Bone marrow infiltration by lymphoplasmocytic cells with suppression of normal hematopoiesis and circulatory deficiency and / or IgM monoclonal immunoglobulin, which increases plasma viscosity (large molecule),
- chronic fatigue, feeling weak and inefficient,
- later bleeding from the nose, gums ( due to hyperviscosity)
- osteolysis (x in contrast to multiple myeloma sparse bone pain),
- chronic headache (increased plasma volume + increased intracranial pressure ),
- heart failure , shortness of breath , congestive heart failure; later visual difficulties (hyperviscosity + increased plasma volume),
- slowly progressing symmetric peripheral neuropathy (caused by monoclonal immunoglobulin as in all gammopathy),
- monoclonal immunoglobulin type IgM can cause other symptoms, have the property of cryoglobulin, or. cold agglutinins.

## Diagnosis

- ↑ ESR (around 100 / h) → we examine Ig quantitatively + examine the presence of monoclonal Ig,
- ↑ total IgM / presence of monoclonal IgM / cytopenia → trepanobiopsy ,
- the value of  $\beta_2$  - microglobulin correlates with the size of the tumor mass + its aggressiveness,
- higher plasma viscosities.

## Differential diagnosis

- MGUS (Monoclonal gammopathy of undetermined significance), IgM multiple myeloma, splenic lymphoma , hairy cell leukemia , CLL, etc.

## Therapy

- **Less aggressive disease** → treatment indicated only with signs of damage to the body,
- monotherapy / combined cytostatic treatment (fludarabine + cyclophosphamide) supplemented or o anti-CD20 antibodies (rituximab; lymphoplasmocyte cells, in contrast to myeloma cells, express the CD20 antigen ),
- a series of therapeutic plasmapheresis is necessary for alleviation of signs of hyperviscosity syndrome .

## Prognosis

- Its course similar to multiple myeloma (remission + relapses),
- bad in resistance to treatment / transformation into a more aggressive type of disease,
- the average survival is 5 years.

## References

### Source

- ws:Waldenströmova makroglobulinemie

### References

- CHILD, P., et al. *Internal Medicine*. 2nd edition. Prague: Galén, 2007. ISBN 978-80-7262-496-6 .

### Related articles and external links

- Multiple myeloma
- IgM
- Waldenström's macroglobulinemia (WIKIPEDIA) ([https://en.wikipedia.org/wiki/Waldenstr%C3%B6m%27s\\_macroglobulinemia](https://en.wikipedia.org/wiki/Waldenstr%C3%B6m%27s_macroglobulinemia))