Microscopic polyangiitis

Microscopic polyangiitis (MP) is a microscopic form of PAN (polyarthritis nodosa) with necrotizing glomerulonephritis (with different severity of extracapillary proliferation in various phases of disease)

Signs and symptoms

Systemic symptoms

- Myalgia, arthralgia
- Purpura

Organ symptoms

- Most often are damaged kidneys with microscopic hematuria and small proteinuria.
- Some patients suffer with hypertension.
- As opposed to Wegner's granolomatosis there are no granulomas in respiratory tract, infliction to other organs is also more rare. There can however occur damage to other organs similar to classic PAN.
- Bleeding into the gastrointestinal tract
- Rarely bleeding into the lungs
- Peripheral neuropathy
- Recurrent sinusitis and/or otitis

Laboratory tests

- Increased sedimentation rate + elevated CRP
- Reduced kidney function, microscopic hematuria, proteinuria, nephrotic syndrome is not developed
- Presence of p-ANCA (perinuclear antineuthrophil cytoplasmic antibodies)

Histological findings

- Histology examination of kidney tissue from biopsy confirms focal segmented necrotizing glomerulonephritis with extracapillary proliferation, sometimes with rapid progression into terminal kidney failure, it is the case of rapid progressive glomerulonephritis
- There are no granulomas
- Pauci-immune glomerulonephritis (imunoflourescence is negative)

Treatment

- Active form: methylprednisone combined with cyclophosphamide
- Long term form: corticosteroids
- Plasmapheresis in the RPGN (rapid progressive glomerulonephritis) and at progressive state of kidney damage
- MP doesn't tend to relapse, there is usually achieved long term remission or the disease slowly progresses

Prognosis

- Depends on the level of kidney damage and response to immunosuppressive treatment
- Chance of survivability is 80% after five years from the origin of disease

Complications

- The most severe complications are caused by long term immunosuppressive treatment.

Bibliography

- KLENER, P, et al. *Vnitřní lékařství.* 3. vydání. Praha : Galén, 2006. ISBN 80-7262-430-X.