Microscopic polyangiitis (MPA) is a form of Vasculitis that affects the small blood vessels of the body. The lungs and kidneys are commonly involved but many different parts of the body can be affected. MPA is an ANCA associated Vasculitis, meaning there are usually antineutrophil cytoplasmic antibodies (ANCAs) present in the blood. It is these ANCAs which are thought to activate cells which cause inflammation and consequent damage to the blood vessel wall.

Who gets MPA?
MPA is an uncommon illness. A study of patients from Norfolk, UK found only 58 new cases between the years 2008 and 2010. This works out at around 6 people affected per million population per year. It is slightly commoner in men than women and usually affects people in middle age.

What causes MPA?
The basic mechanism is inflammation of the small blood vessels involving ANCAs although it is not yet known what triggers their manufacture.

What are the symptoms of MPA?
MPA can affect different parts of the body but you may feel tired, have joint and muscle aches, or lose your appetite. Other symptoms will depend on which part of your body is affected. If your lungs become involved you may feel breathless and sometimes develop a cough productive of blood. Rashes and ulcers can develop on the skin. Your eyes may become red and feel painful, dry or gritty and you may have trouble with vision. Involvement of the nervous system can result in numbness, pins and needles, a burning pain or electric shocks in the hands or feet.

How is MPA diagnosed?
The diagnosis may be suspected by a doctor on the basis of the pattern of your symptoms and examination features. A blood test for antineutrophil cytoplasmic antibodies (ANCA) is positive in 8 out of 10 people. Chest x-rays are performed to detect lung involvement. Other tests will depend on the part of the body affected and may include a blood count, kidney function test, a heart tracing, electrical tests on the nerves, scans and kidney or lung biopsies.

What is the treatment for MPA?
The treatment you are offered will depend on the severity of your illness. To start with you may be given a steroid such as prednisolone and a medicine from the immunosuppressant group called cyclophosphamide. Immunosuppressants act by lessening the activity of the immune system. Recently, a medicine called rituximab has been found to be effective in some people. Once the illness is under control, the dose of steroid may be reduced and medicines with a low risk of side effects used such as azathioprine.
Does MPA get better?
In about 9 out of 10 people the symptoms improve with treatment. In about 8 out of 10 people they settle down completely. The disease may return in 3 out of 10 people. Most people with MPA lead a relatively trouble-free life, unless kidney problems develop.

Further reading

Watts RA et al The contrasting epidemiology of granulomatosis with polyangiitis (Wegener’s) and microscopic polyangiitis.


