

# Progressive multifocal leukoencephalopathy

It is a rare viral infection caused by **demyelination** of nerves. The condition is a failure of cellular immunity. It is a **fatal** complication of diseases such as lymphoma, leukemia, SLE, HIV infection and sarcoidosis.

## Etiology

Progressive multifocal leukoencephalopathy (PML) is caused by reactivation of saprophytic papovavir.

## Clinical picture

Papovirus attacks oligodendroglia and causes demyelination of nerves. This process takes place without any signs of inflammation. Important clinical symptoms include:

- personality change,
- cortical blindness,
- seizures,
- progressive dementia,
- hemiparesis.

Patients may have extensive diffuse hemispheric involvement and death occurs without remission in 3-6 months.

## Diagnosis

Progressive multifocal leukoencephalopathy is in most cases diagnosed at an advanced stage. Brain biopsy, CT and MRI. In these examinations, we observe multi-focal changes in white matter. In the cerebrospinal fluid we find an increase in gamma globulins.

## Therapy

There is no therapy for this disease yet, with half of the patients dying within a few months of diagnosis. <sup>[1]</sup>

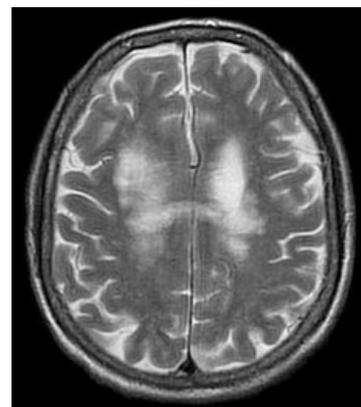
## Links

### Related articles

- Viral infections of the nervous system

### References

1. SEIDL, Zdeněk – OBENBERGER, Jiří. *Neurologie pro studium i praxi*. 1. edition. Praha : Grada Publishing, 2004. ISBN 80-247-0623-7.



MRI showing progressive multifocal leukoencephalopathy