

# Polyneuropathy

**Polyneuropathies** represent an etiologically extensive group of non-traumatic peripheral nerve disorders. Causes may include:

1. **toxic substances:** lead (mainly extensors), alcohol (mainly *peroneus muscle*),
2. **metabolic diseases:** diabetes mellitus, porphyria, uremia, liver cirrhosis, hypothyroidism,
3. **infectious diseases:** diphtheria, mumps, mononucleosis, typhus,
4. **drugs** (cytostatics),
5. dysproteinemia and paraproteinemia (myeloma),
6. **paraneoplastic polyneuropathies** (mainly small cell lung cancer),
7. **autoimmune disease** (celiac disease)<sup>[1]</sup>
8. **hereditary** (Charcot-Marie-Tooth disease).

## Common clinical signs

Paresthesia, glove-like and stocking-like hypoesthesia, often symmetrical involvement, rather sensitive than the motor, more frequent involvement of DK (longer course of peripheral nerves), motor disorders (usually later), vegetative disorders (skin atrophy), trophic changes on nails, skin, disorders of internal organs (urination, delayed gastric emptying, constipation, erectile dysfunction, impotence). It develops over weeks, months and years.

## Division of polyneuropathies according to course

- **Acute:** days to a month (porphyria, motor disorders predominate, more on HKK),
- **Subacute:** in weeks - diphtheria, drugs (vincristine), metal poisoning (lead, thallium, arsenic),
- with a **chronic** course: paraneoplastic, paraproteinemia, collagenosis, metabolic (diabetes mellitus, uremia, hypothyroidism), hereditary.

## Differential diagnosis

Very difficult. Cause not identified in 20–30 %.

## Diagnostics

EMG, detailed laboratory height. blood and urine, sometimes we cannot do without examination of cerebrospinal fluid, nerve and muscle biopsy and other paraclinical tests.

## Links

### Related articles

- SEIDL, Zdeněk – OBENBERGER, Jiří. *Neurology for study and practice*. 2. edition. Grada Publishing, 2004. ISBN 80-247-0623-7.

### Related articles

- Polyneuropathy/PGS/diagnosis
- Metabolic and toxic encephalopathies and neuropathies
- Acute conditions in neurology and disorders of consciousness/PGS
- Neuroinfections/ CNS/PGS inflammations
- Balance disorders/PGS
- Neuropathy and neuromuscular diseases/PGS
- The most common syndromes and diseases of pediatric neurology/PGS
- Tremor/PGS/diagnosis

## Reference

1. Česká republika. Ministry of health. Targeted screening for celiac disease (methodical guideline). In *Bulletin of the Ministry of Health of the Czech republic, volume 3*. 2011. pp. 51. Available from <[http://www.mzcr.cz/Legislativa/dokumenty/vestnik-c\\_4741\\_2162\\_11.html](http://www.mzcr.cz/Legislativa/dokumenty/vestnik-c_4741_2162_11.html)>.