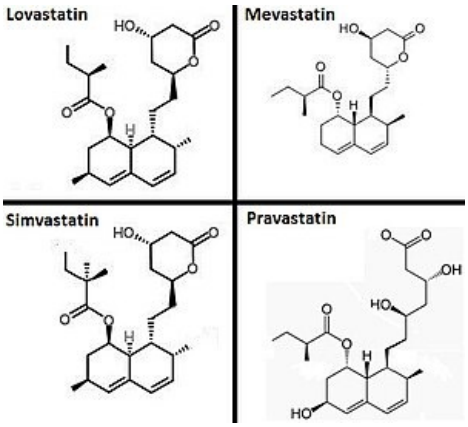
Statin myopathy

One of the most feared side effects of statins is **muscle tissue damage**. The pathophysiological mechanism of this damage is **not entirely clear**, and it is thought to be:

- sarcolemma instability resulting from a decrease in cholesterol (cholesterol is an important building block of sarcolemma);
- mitochondrial damage;
- direct myotoxicity.

Muscle damage can be classified into 3 groups:

1. **myalgia** - muscle weakness, stiffness, pain, or cramping at rest or on exertion; creatine kinase (CK) elevation does not occur;
2. **myositis** - CK elevation with/without muscle symptoms;
3. **rhabdomyolysis** - muscle symptoms with CK elevation 10 times above the upper limit of the normal range.



Statins

The risk of statin myopathy **increases when statins are combined with drugs that increase the plasma concentration of statins**. These are drugs that, like statins, are metabolized by cytochrome P450 complexes (simvastatin, atorvastatin, lovastatin, rosuvastatin - cytochrome cyp3A4; fluvastatin - cyp2C9, pravastatin is not metabolized).

If statin myopathy is suspected, it is necessary to **examine** the patient's **thyroid function** (hypothyroidism) and **alcohol abuse.** Laboratory determination of **CK level** is necessary and **statin should be discontinued** for a minimum of 6 weeks.

References

Related articles

- Myopathy
- Statins

Used literature

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2. ↑ Skočit nahoru k:a b ŠTEFAN, Alušík. Nežádoucí účinky statinů – staří známí i noví hříšníci. *Medical Tribune.* 2011, roč. -, vol. 21, s. -, ISSN 1214-8911.
3. ↑ GOLÁŇ, Lubor. Chyby a úskalí terapie statiny. *Interní medicína pro praktické lékaře* [online]. 2004, roč. -, vol. 1, s. 31-32, dostupné také z <http://www.medicinapropraxi.cz/pdfs/med/2004/01/08.pdf>.
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