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## ■ ENGLISH SUMMARY

# Endovascular treatment for acute ischaemic stroke

Endovascular methods can be utilised to treat acute proximal cerebral artery occlusion if intravenous thrombolysis (IVT) is contraindicated or does not recanalise the artery. Techniques include intra-arterial thrombolysis (IAT) and mechanical endovascular thrombectomy (MET), solely or in combination.

This systematic review assesses these techniques' effectiveness and safety. We collected data on clinically important outcomes and assessed the strength of evidence according to the GRADE methodology.

Evidence is based on 61 original studies: 3 randomised trials (all on IAT), 11 case-control studies, and 47 non-controlled prospective cohort studies. Three studies analysed the cost-effectiveness of MET. The literature is heterogeneous as regards patient populations, interventions and treated arteries.

Endovascular treatments (IAT or MET or both together) improve the functional outcome of stroke patients with proximal cerebral artery occlusion compared to that of patients receiving placebo or IVT. Symptomatic intracerebral haemorrhage risk is higher with endovascular treatments than with placebo, but equal to that with IVT. There was no evidence of higher mortality with endovascular treatments in comparison to placebo or IVT.

Applying endovascular techniques requires careful patient selection and special training. All 5 university hospitals in Finland have sufficient readiness for these treatments. Future studies will define more clearly which patients in particular could benefit from these invasive techniques.