Ginkgo (Ginkgo biloba)

Practice points

Ginkgo may be beneficial to people with various forms of dementia or cognitive impairment. It can take between 4 weeks to 6 months to exert optimal effects.

Key indications

Dementia/ Cognitive Impairment: Improves psychological and behavioural symptoms in people with various types of dementia (Alzheimer’s, vascular or mixed) (systematic review and meta-analysis). May stabilise or slow the decline in cognition, function and behaviour in patients with cognitive impairment and dementia, especially for those with neuropsychiatric symptoms (systematic review and meta-analysis).

Working memory: Cognitive benefits in healthy adults are inconclusive although a 2014 RCT demonstrated improved working memory function in healthy middle-aged women.

Female libido: May improve libido in post-menopausal women (RCT).

Key actions

May help protect against cerebral ischaemic damage via several mechanisms including:

- Antioxidant
- Anti-inflammatory
- Small increases in cerebral blood flow
- May inhibit amyloid pathology
- Cholinergic and dopaminergic effects
- Cardioprotective

Recommended Doses

A majority of trials have used a ginkgo extract standardised to ginkgo flavone glycosides 24% and terpenoids 6% such as the proprietary extract EGB761.

Dementia/ Cognitive Impairment: 120-240 mg / day standardised extract in divided doses

Working memory: 120 mg / day standardised extract (6 weeks)

Female libido: 120-240 mg / day standardised extract in divided doses (1 month)

Adverse Effects

Generally well tolerated with occasional reports of gastrointestinal upset, headache and dizziness. Despite rare case reports linking ginkgo with haematomas and haemorrhagic conditions, clinical trials have not demonstrated significant effects on platelets or bleeding risk.

Cautions/ Contraindications

Discontinue use if signs of unusual bruising or bleeding occur. Although Ginkgo does not appear to affect clotting times it may be prudent to suspend use one week prior to surgery in patients at risk of excessive bleeding.

Safety in pregnancy and lactation has not been confirmed although no adverse effects are expected.

Possible Interactions

- Warfarin, aspirin and antiplatelet drugs: multiple clinical trials conclude ginkgo is unlikely to increase risk of bleeding with warfarin. Extremely rare case reports exist where ginkgo was taken with anticoagulant or antiplatelet drugs
- Chlorpromazine and haloperidol: ginkgo may add to the beneficial effect of halperidol, chlorpromazine and olanzapine in the treatment of schizophrenia
- Hypoglycaemic drugs: ginkgo may increase or decrease blood glucose levels - conflicting data and considered unlikely

References