INAHTA Brief Issue 2014/003

Title Is patient self-monitoring (including self-testing and self-management) of oral anticoagulation therapy safe, efficacious and cost-effective?

Agency HIS; Healthcare Improvement Scotland
Delta House, 50 West Nile Street, Glasgow G1 2NP, Scotland
Tel: +44 141 225 6998; e-mail: Doreen.Pedlar@nhs.net; website:
http://www.healthcareimprovementscotland.org/our_work/technologies_and_medicines/shtg.aspx

Reference Evidence note 50; ISBN 1-84404-952-3;
http://www.healthcareimprovementscotland.org/our_work/technologies_and_medicines/shtg_-_evidence_notes/evidence_note_50.aspx

Aim

This work was undertaken to update evidence note 27. It summarises the evidence comparing the clinical effectiveness of self-testing or self-management of International Normalised Ratio (INR) with usual care in terms of primary outcomes such as rates of thromboembolic events such as stroke, rates of severe haemorrhagic events and mortality. The report also examines cost effectiveness evidence.

Conclusions and results

- Meta-analyses of randomised controlled trials data in patients receiving long-term oral anticoagulation therapy with vitamin K antagonists report that self monitoring of INR reduces the rate of thromboembolic events, compared with usual care, without affecting the rate of major bleeding events or mortality.
- In subgroup analysis, self-management was more effective than self-testing.
- Analyses of outcomes by age and indication for therapy highlighted that there were reductions in thromboembolic events in those aged <55 years and in participants with a mechanical heart valve.
- Where quality of life is reported, the majority of studies record beneficial effects.
- Economic analyses suggest that in the UK healthcare setting, INR self monitoring is unlikely to be cost-effective when compared with usual care.

Recommendations

Evidence notes do not make recommendations for NHSScotland. See SHTG Advice Statement 007/13

Methods

A systematic search of the secondary literature was carried out between 26 November and 5 December 2012 to identify systematic reviews, health technology assessments and other evidence-based reports. Medline, Medline in process, Embase, CINAHL and Web of knowledge databases were searched for systematic reviews and meta-analyses. A follow-up search of the databases was carried out between 22–24 April 2014 to identify qualitative material on patient preferences.

Key websites were searched for guidelines, policy documents, clinical summaries, economic studies and ongoing trials.

Further research/reviews required

In the light of the consideration of this technology within the NICE diagnostics assessment process and expected publication of NICE guidance in 2014, this evidence note will be considered for review again in 2014.

Written by

Doreen Pedlar, Project Co-ordinator, HIS, Scotland.