Abstracts

Enalapril, Fosinopril and Lisinopril were associated with significantly reduced risk of death within one year. Further research is needed to examine other outcomes including cost-effectiveness in the treatment of heart failure.

OBJECTIVES: To assess the clinical effectiveness of point-of-care (POC) INR monitoring devices for patients on long-term oral anticoagulation therapy (OAT). METHODS: A systematic review of the clinical literature was performed. Several POC devices were published between January 1996 and November 2008 comparing POC devices to routine anticoagulation control were included in the analysis. RESULTS: Of the 17 studies included in the analysis, 15 studies compared patient self-management or self-testing to routine anticoagulation control and 2 studies examined the use of POC devices by primary health care practitioners. There was variation among the studies regarding observation periods, indication for OAT and overall study quality. Based on pooled analyses, there was no significant difference in major hemorrhagic events between patients in POC monitoring groups and usual care groups (OR 0.77, 95% CI 0.54, 1.10). POC monitoring resulted in significantly fewer thromboembolic events (OR 0.56, 95% CI 0.39, 0.80) and deaths (OR 0.63, 95% CI 0.41, 0.97) compared with usual care. Subgroup analyses included POC strategy, control strategy, indication for anticoagulation, study length of follow-up and industry-sponsored trials.

CONCLUSIONS: The review of clinical evidence suggest that using POC monitoring devices for patients on long-term OAT results in significantly fewer deaths and thromboembolic events and may result in better INR control than conventional laboratory testing. Nevertheless, the use of POC devices should factor patient suitability, health system constraints and affordability.

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POINT-OF-CARE INR MONITORING DEVICES FOR PATIENTS ON LONG-TERM ORAL ANTICOAGULATION THERAPY

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OBJECTIVES: Assess the clinical effectiveness of point-of-care (POC) INR monitoring devices for patients on long-term oral anticoagulation therapy (OAT). METHODS: A systematic review of the clinical literature was performed. Several POC devices were published between January 1996 and November 2008 comparing POC devices to routine anticoagulation control were included in the analysis. RESULTS: Of the 17 studies included in the analysis, 15 studies compared patient self-management or self-testing to routine anticoagulation control and 2 studies examined the use of POC devices by primary health care practitioners. There was variation among the studies regarding observation periods, indication for OAT and overall study quality. Based on pooled analyses, there was no significant difference in major hemorrhagic events between patients in POC monitoring groups and usual care groups (OR 0.77, 95% CI 0.54, 1.10). POC monitoring resulted in significantly fewer thromboembolic events (OR 0.56, 95% CI 0.39, 0.80) and deaths (OR 0.63, 95% CI 0.41, 0.97) compared with usual care. Subgroup analyses included POC strategy, control strategy, indication for anticoagulation, study length of follow-up and industry-sponsored trials.

CONCLUSIONS: The review of clinical evidence suggest that using POC monitoring devices for patients on long-term OAT results in significantly fewer deaths and thromboembolic events and may result in better INR control than conventional laboratory testing. Nevertheless, the use of POC devices should factor patient suitability, health system constraints and affordability.