

Dispositivos de coagulometría portátil en el seguimiento y control ambulatorio de la terapia anticoagulante oral: revisión sistemática.

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OBJECTIVE: To compare portable coagulometer devices and conventional coagulometers. The clinical validity will be estimated via anticoagulation control (maintenance of therapeutic range), patient satisfaction, thrombotic or haemorrhagic events and mortality. Analytical validity will be studied in quality control terms.

DESIGN: Systematic review.

DATA SOURCES: MEDLINE and EMBASE databases, CRD, Cochrane, EMEA, FDA, EuroScan and the ClinicalTrials.gov.

METHODS: Inclusion criteria were studied in patients on anticoagulation therapy who used portable coagulometer devices. In an additional undertaking, the comparison with lab references was looked for, in order to evaluate the effectiveness. The quality of selected studies was assessed according to CASPe check-list. As meta-analysis was not possible, a qualitative synthesis was made.

RESULTS: Four evaluation reports and 7 systematic reviews were selected (two of them with meta-analysis). After these, 22 original articles were included for this review and they had high or very high score for CASPe check-list ($\geq 7/10$). Almost all of the studies found very high correlations between portable coagulometer devices and conventional coagulometers ($r > 90$), and clinical advantages such as lower incidence of thromboembolism events. Three systematic reviews showed a lower mortality index.

CONCLUSIONS: The analytical-validity related articles show that portable coagulometers have an equivalent effectiveness to conventional coagulometers. Studies that include patient-reported outcomes show that self-monitoring patients, by means of portable coagulometers, have better analytical measurement results and fewer rates of thromboembolic events. Survival was analysed in very few studies; nevertheless, all of these show lower mortality. Similarly, the minority of selected articles includes economic evaluations, although they suggest a better cost-effectiveness of portable coagulometers compared to the conventional mode.

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