**LETTER**

**Patients' knowledge of warfarin treatment**

We previously reported an evaluation of advice given to 50 newly referred patients to an anticoagulant clinic and of patients' knowledge of anticoagulant treatment.1 Many patients reported not having received clear advice from hospital clinicians and doctors in the anticoagulant clinic on five aspects of anticoagulant treatment: the calendar method, how warfarin works, potential complications, drugs to avoid, and safe levels of alcohol consumption. When questioned on four aspects patients' knowledge was also found to be poor. These aspects cover items of advice in the Department of Health's booklet on anticoagulant treatment for patients which were thought to be the most important to minimise the risks of anticoagulant treatment.2

To improve advice given to patients specific guidelines on counselling patients about these five aspects of anticoagulant treatment were widely disseminated among hospital clinicians.3 For doctors in the anticoagulant clinic, a counselling checklist on these and other aspects of anticoagulant treatment was incorporated into the anticoagulant clinic records. To improve patient knowledge an information leaflet was made available to patients and a poster was displayed within the clinic. Both were based on information in the Department of Health's booklet. To reinforce the advice given healthcare assistants within the anticoagulant clinic were instructed to ensure that the leaflet was understood by patients and were trained to ask them five key questions on potential complications at each clinic visit (change in treatment, hospital admission, bleeding or bruising, attendance at the accident and emergency department, and forthcoming surgery). We performed a second evaluation of 52 newly referred patients, using the same methods as in the first evaluation. There were no significant sociodemographic or clinical differences between the two study populations. Overall, more patients reported receiving clear advice from hospital doctors and doctors in the anticoagulant clinic on three or more aspects compared with the first evaluation (77%, 40/52 v 60%, 30/50 respectively). Slight improvements were reported in three aspects of advice given: the calendar method, how warfarin works, and drugs to avoid, but these were not significant (table). Improvements in patient knowledge were also small, but the proportion of patients identifying two potential complications namely, one type of drug to avoid and (although fewer patients reporting having received clear advice) safe levels of alcohol consumption – increased significantly. The proportion of patients identifying aspirin as a drug to avoid decreased, but not significantly. In addition, fewer patients expressed concern about anticoagulant treatment in the second evaluation than the first (44%, 23/52 v 68%, 34/50; treatment p < 0.01). The reduction in anxiety may reflect better communication between patients and healthcare professionals, leading to enhanced patient knowledge and therefore better understanding of safe anticoagulant treatment.

The second evaluation showed overall improvements in doctors giving patients advice on anticoagulation and an increase in patients' knowledge of their treatment. We recommend a multiple strategy of wider dissemination of guidelines and the incorporation of counselling checklists in anticoagulant record cards to ensure that comprehensive advice is given initially. In addition, reinforcing this advice with written educational guides and active inquiry about potential complications will contribute to improving patient knowledge.

Studies evaluating the relation of giving patients' advice and improved clinical outcome showed variable results and we therefore suggest that better patient education in anticoagulation is part of an overall programme in improving effective anticoagulant control.

The counselling checklist and patient information leaflet are available on request.

**BOOK REVIEWS**


Quality Assurance in Medical Care is a volume of essay chapters by different authors. Five general chapters are devoted to the principles of quality assurance as they apply particularly to health care, including chapters on information technology, patient outcomes, a perspective of health economics from Alan Williams, and a thoughtful contribution on scientific and methodological issues in quality assurance from Ian Russell and his colleagues. There are five chapters on quality assurance in laboratory specialities – blood transfusion, clinical biochemistry, histopathology, laboratory haematology, and medical microbiology – which have a longer tradition of quality control and quality assurance than does clinical practice, and to complete the review of diagnostic services there is a chapter on quality assurance in radiology. Eight chapters are set aside for quality assurance in different aspects of health care – for example, nursing practice, general practice, and hospital practice; within hospital specialities management of chronic disease, surgery, and maternity are highlighted. Two chapters deal with prescribing drug treatment, one the control and standardisation of biological medicines...