CORRESPONDENCE

this does not necessarily affect the overall process of haemostasis in any clinically significant way.

When adding any correction in this area, we feel that our study lends weight to the view that the bleeding time test in isolation is of limited use when making clinical management decisions with respect to the provision of regional anaesthesia for women in labour.

We are grateful for the opportunity to reply to Dr Bromage's letter also. While it is gratifying to know that our paper [2] has provoked some discussion of this interesting topic, we feel that Dr Bromage may have misinterpreted much of what we were attempting to show. As to the question of how we performed the bleeding time test, we would reiterate that although, because of limited journal space, we were not totally explicit in our description of the execution of the test, care was taken to comply precisely with the manufacturer's instructions. By this we mean that the flow of blood was "blotted" with filter paper and the platelet plug was not disturbed by this process.

Dr Bromage criticizes the way in which we have interpreted our data. Although the variability between observers and subjects was similar, he divides the observer group into two and points out that, in doing this, he has established a significant difference in observer performance. We are unsure as to what significance Dr Bromage attributes to this observation, but we are also very dubious about the validity of performing this type of meta-analysis. There can be no basis for deliberately selecting certain aspects of the results to show an effect which the study was not designed to test. In doing this the scientific objectivity of the study is undermined.

Criticism is made also of the accuracy of the bleeding times as assessed by the study observers. Our study set out to examine the performance of clinical anaesthetists in a clinical setting and not to assess the merits of the bleeding time test per se. We were interested in examining the bleeding time as a clinical tool, rather than one used in the laboratory or in epidemiological practice. We specifically limited our interpretation of the results to the reliability of the bleeding time and not to its validity. We state in our discussion that, whether or not the bleeding times measured were strictly accurate, we had demonstrated a large variation in the clinicians' performance. We concluded, therefore, that a single bleeding time result, when obtained by clinicians, should not necessarily be taken as reliable evidence of the presence or absence of a bleeding tendency.

While we would agree that anaesthetists should attempt to reduce anaesthetic adverse outcomes to zero, we would urge that this objective is achieved in a rational way. The anaesthetist may think that he is better armed to make an important clinical decision with the result of a bleeding time test, but this may reflect the desire to be reassured by a measurement rather than a reflection of the true likelihood of clinically significant bleeding. It may also be prudent to remember that there may be a degree of morbidity from what the anaesthetist fails to do, as well as from what he does. Failure to provide extradural analgesia may avoid morbidity from what the anaesthetist does, but it may also be prudent to remember that there may be a degree of morbidity from what the anaesthetist fails to do, as well as from what he does. Failure to provide extradural analgesia may avoid certain potential problems, but may produce others. Attempts to reduce adverse anaesthetic outcomes to zero must take this aspect into account.

In a recent major discussion of clinical measurement [5], Professor Sykes reminded us of the importance of questioning the significance of all clinical measurements we make. He stated that we must ensure that measurements are evaluated correctly by rigidly controlled trials before they are accepted into clinical practice. We agree wholeheartedly with this wisdom and would submit that our examination of the bleeding time represents an attempt to follow this advice.

S. W. O'KELLY
E. G. LAWES
Southampton

TRAINING IN FIBROSCOPIC INTUBATION

SIR,—1 support Drs Brock-Utne and Jaffe [1] in advocating the sitting position for most patients in whom awake, fibroscopic intubation is indicated. At Green Lane Hospital, many anaesthetists have adopted this approach for awake intubation (usually nasotracheal), after observing the ease with which otorhinolaryngology (ORL) surgeons visualize the larynx in seated, unsedated outpatients.

The ORL clinics are used for the training of anaesthetic registrars, who are rostered to perform fibroscopy at two weekly clinics for preoperative and postoperative assessment of patients with head and neck cancer. Registrars are taught visualization of the nasopharynx and larynx by the surgeons and surgical registrars: the patient is awake, co-operative and relaxed, as the procedure is familiar, quick and brings minimal discomfort. An Olympus nasopharyngeal fibroscope (ENF P2 or P3) is inserted through the nose after the nasal cavity and oropharynx have been anesthetized with two sprays of 10% lignocaine to each area. The appearance and dimensions of the nasal cavity, nasopharynx and "upside-down" larynx, are different from those in the anesthetized supine patient approached from behind the head. Ten to 12 examinations are performed at the two clinics.

Registrars can then use the nasopharyngeal scope alone to assess difficult or obstructed airways in the ORL ward as part of the preanaesthetic visit. Anaesthetists adapt readily to performing an awake fibroscopic intubation with the patient in the sitting position, using the fibroscopic bronchoscope with its narrower calibre and longer length. Other specialties within the medical profession in Australasia have adopted this technique for awake intubation more readily than we. We must learn from them and pick up the fibroscopic scope with as much confidence and facility as we pick up the laryngoscope.

M. J. PESKETT
Auckland, New Zealand


BLOOD LOSS DURING TOTAL HIP REPLACEMENT

SIR,—We read with interest the paper entitled "Total hip replacement surgery without blood transfusion in Jehovah's Witnesses" by Drs Wittmann and Wittmann [1].

Recently, we completed a retrospective study to examine transfusion practice in 150 patients undergoing cemented Charnley total hip arthroplasty and found that 97% of patients received an average of 2.7 units per patient. The mean blood loss was 1500 ml and duration of surgery 85 min. These findings are similar to those of Friedman [2] and Sarma [3]. We are currently re-examining transfusion practice in a prospective study of total hip arthroplasty patients in whom specific guidelines for transfusion exist: PCV of less than 30% for males and less than 27% for females. Our findings after 60 patients have demonstrated a significant decrease in the proportion of patients transfused (currently 41%). The average transfusion for the group as a whole is now 0.44 units per patient. There has been no demonstrable increase in morbidity or in the duration of inpatient stay.

Our findings thus far suggest that the introduction of simple criteria for transfusion substitution reduces unnecessary transfusions. The anaesthetist may think that he is better armed to make an important clinical decision with the result of a bleeding time test, but this may reflect the desire to be reassured by a measurement rather than a reflection of the true likelihood of clinically significant bleeding. It may also be prudent to remember that there may be a degree of morbidity from what the anaesthetist fails to do, as well as from what he does. Failure to provide extradural analgesia may avoid certain potential problems, but may produce others. Attempts to reduce adverse anaesthetic outcomes to zero must take this aspect into account.

In a recent major discussion of clinical measurement [5], Professor Sykes reminded us of the importance of questioning the significance of all clinical measurements we make. He stated that we must ensure that measurements are evaluated correctly by rigidly controlled trials before they are accepted into clinical practice. We agree wholeheartedly with this wisdom and would submit that our examination of the bleeding time represents an attempt to follow this advice.

S. W. O'KELLY
E. G. LAWES
Southampton

