Prevention of Pulmonary Embolism

Sir,—Our views on the prevention of pulmonary embolism differ from those expressed in your excellent leading article (7 April, p. 1) in two respects which we believe to be important.

It is stated that "once a diagnosis of pulmonary embolism is made, bilateral ascending phlebography is mandatory." There is no doubt that phlebography is mandatory, but not necessarily by the ascending route. The main danger to life is from thrombus in the iliofemoral segment. We would agree with Mavor and Galloway that this segment must be clearly delineated. In our experience ascending phlebography, despite many modifications and improvements of technique, does not consistently define the iliofemoral segment sufficiently clearly—especially in the case of mural thrombus propagating from internal iliac veins into common iliac, or from common iliac into vena cava. Furthermore, while individual radiologists who specialize in ascending phlebography claim good iliofemoral visualization, this is exceptional. On the other hand sufficient contrast can consistently be introduced via a needle in the common femoral vein. In the event of there being any difficulty with, or contraindication to, the femoral route our second choice would be ascending rather than percutaneous phlebography since the latter requires general anaesthesia and carries more risk.

Our current practice when pulmonary embolism is diagnosed is to recommend urgent bilateral femoral phlebography unless ultrasound examination suggests that the ascending route would be more profitable. The presence of recent thrombus should suggest thrombolytic therapy or thrombectomy. If the iliofemoral segment is free of thrombus the situation becomes less urgent. In this case, if a firm diagnosis of embolism has been made, continuous intravenous heparin therapy by infusion pump is started. Bilateral ascending phlebography is usually recommended some time within the next two or three days. Upon the site and extent of the thrombus, as defined by phlebography, is based the nature and duration of the anticoagulant regimen.

Secondly, we disagree with the assertion that the surgeon is better employed concentrating on "screening, early diagnosis, and vigorous treatment" rather than on any of the available methods of prophylaxis, which you say are unproven. No one would dispute the need for screening, early diagnosis, and vigorous treatment. But how is it proposed that we achieve early diagnosis? Early diagnosis by clinical means will fail to prevent the majority of fatal emboli. Screening by fibrinogen, with current resources, is not practical for routine use in busy surgical practice. Ultrasound examination in non-occlusive thrombosis is not, in our experience, a good screening method. We find the estimation of serum fibrinogen and fibrin degradation products of real value in the diagnosis of thromboembolism, but would doubt whether available laboratory methods make this suitable for universal application as yet.

In our view there is a large body of evidence in support of several methods of preventing venous thrombosis—for example, pneumatic calf compression, electric muscle stimulation, dextran, and low-dose subcutaneous heparin. It is almost certain that these methods also protect from embolism although, as you rightly point out, the direct evidence has yet to come. Therefore we believe that a surgeon would be better advised either to apply one or more of these methods routinely, especially in high-risk patients, or to take part in clinical trials designed to answer the very questions you raise. We are, etc.,

C. V. RUCKLEY
I. M. C. MACINTYRE
D. R. B. JONES
W. A. COPLAND

Western General Hospital,
Edinburgh

8 Kakkar, V. V., Field, E. S., Nicolaides, A. N., and Flute, P. T., Lancet, 1971, 2, 669.

Ch.M. Glasgow

Sir,—Dr. R. G. D. Newill (5 May, p. 305) is, I note, a Doctor of Medicine of London University and is thus entitled to use the prestigious title of Doctor.

But what about the mass of us who are only Bachelors? Our habit of calling ourselves Doctor when we are stopped by traffic cops or are trying to book a table in a restaurant is a source of confusion to everybody. Is it not high time the Scottish universities reverted to their old practice of granting M.D. degrees as their basic qualification and thus making honest men of us? You never know, England might follow.—I am, etc.,

DONALD DOUGLAS

The University,
Dundee