to their professional ambitions. A recent authoritative observation that there is a scarcity of first-class applicants for consultant vacancies in some of the more exciting specialties may well be the first sign of a decline in British medicine.

There are a number of improvements in the terms and conditions of service which are urgently needed to arrest the progress of discontent among hospital doctors, in particular the younger doctors. The working party’s memorandum puts forward many proposals, most of which are familiar and have evolved from much debate within the profession. Their assembly in a single document is a reminder that it originated in a demand for a “charter” for hospital medical staff. What has now been produced is in the form of a draft for consideration by the Joint Consultants Committee, the C.C. and S. Committee, and the Hospital Junior Staffs Group Council. It will be discussed at a national conference of hospital medical staff on 9 November, and in its final form it is to be the subject of negotiations with the Health Ministers.

The charter (the title will stick) is to be welcomed as a document which sets out the causes of friction between employer and employee. The majority of doctors concerned will see in its proposals remedies for many of their current dissatisfactions. Yet no one would pretend that they are the whole answer to the more intangible but very real frustrations which so many doctors clearly feel. After 18 years’ experience there is room for an impartial appraisal of the relationship between State and Medicine. There are those who believe that an alliance between the two in a nationalized, centrally controlled medical service cannot be other than inimical to the independence essential to a profession trained to responsibility and expected to take it. It is earnestly to be hoped that a group of informed, uncommitted people can be persuaded to start with a blank sheet and set down their views on how the benefits of modern medicine can be brought to the service of the people while at the same time preserving what is indispensable for worthwhile professional life. Questions of the terms and conditions of service would then tend to fall naturally into place.

Blockade of Emboli

Despite the efforts that have been made to prevent venous thrombosis and pulmonary embolism the condition remains common, and indeed the diagnosis is being made more frequently.1 This may in part be due to the use of more refined methods of diagnosis. Since it became clear that in patients with pulmonary embolism abnormalities on plain x-ray films may be minimal the introduction of radioisotope scanning,2 catherization of the right and left side of the heart for pressure measurements,3 angiography of the pulmonary artery,4 and better knowledge of the changes in the electrocardiogram5 have all contributed to more accurate diagnosis. The stimulus to develop techniques for more certain diagnosis may have come from increased interest in surgical measures to deal with major pulmonary emboli and to forestall recurrent emboli.6 The new approaches to major pulmonary embolectomy have been recently reviewed.7

J. Homans8 was the first to propose ligating the venous system proximal to the thrombus to prevent pulmonary embolism. Ligation of the femoral vein was used first, but in many cases it was difficult to decide which leg to choose, and not surprisingly this technique did not always prevent recurrence of the embolism. Taken together the poor results of ligation of the femoral veins and the frequent finding of thrombus in the great veins of the pelvis suggested that a better procedure might be ligation of the vena cava just below the renal veins. By 1958 W. A. Dale was able to show that this operation could stop recurrent emboli from reaching the lungs.9 However, many patients treated in this way developed signs of interference with the venous return, ranging from minimal oedema and superficial varicose veins to gross oedema and sometimes gravitational ulcers. Attempts were made to avoid these side-effects. Partial occlusion of the vena cava was tried in the hope that the obstruction to the lumen would allow some blood to pass but would prevent the passage of emboli large enough to cause death. Among the techniques used were a Dacron darn across the lumen,10 the placing of several mattress sutures between the anterior and posterior walls to make three to four smaller passages,11 and the use of narrowing clamps.12 13

Do these partial venous occlusions function and do they prevent the late side-effects of caval ligation? J. J. Bergan and his colleagues14 found plication of the vein and a Dacron sieve to be as effective as ligation in preventing the recurrence of embolism. Both methods of partial occlusion reduced the number of late sequelae of operating on the vena cava, but the sieve technique was better in this respect, and post-operative venograms showed that it also resulted in better flow through the vessel. However, F. C. Spencer reported excellent clinical results with plication. Of his 23 patients 20 were shown post-operatively to have patent venae cavae,15 and in the three patients whose vena cava was occluded one was found

References

5 Litman, D., Pulmonary Embolic Disease. Grune and Stratton.
to have a vena cava that had become recanalized two years later. So partial occlusion seems to be as good as ligation in stopping recurrence of emboli and to have fewer sequelae; but in some patients there will be complete occlusion of the vena cava by thrombosis.

When should an operation of this kind be used in the treatment of recurrent pulmonary emboli? When adequate anticoagulant therapy has failed or when anticoagulants are contraindicated—for example, immediately after very extensive surgical wounds, when the patient has ulcerative disease of the gut or has had a stroke, and after some extensive urological operations because of the complications of haematuria. These operations are done much more often in North America than in Britain. In the U.S.A. prophylactic venous interruption has indeed been advocated as a routine at the time of operation for caesarean section. This is going too far in the light of the results of treatment with anticoagulants, the sequelae of ligation, and the limited information so far available on operation providing partial venous obstruction.

At what level should an operation be done? If tenderness is limited to one calf and there are no signs in the thigh, ligation of the femoral vein must still be considered, especially if the patient is very ill. When there is no indication which leg is affected, or when there is evidence of thrombi in the pelvic veins, then interruption of the vena cava is the operation of choice. When there is extensive sepsis in the pelvis, ligation is still the best procedure, but if no sepsis is present partial occlusion is probably a better type of operation. However, the indications for these measures may require revision in the light of the results obtained by venous thrombectomy, when large peripheral thrombi are located by venography and removed immediately by surgery. This approach has become more popular since it has been shown in recent years both experimentally and clinically that many pulmonary emboli can undergo thrombolysis. It remains to be seen whether venous thrombectomy—first tried by R. Leriche in 1928—will now find a permanent place in the management of venous thrombosis and pulmonary embolism. Venous interruption should be used very sparingly until its value is clear.

Audio-visual Aids to Learning

Teaching by audio-visual methods forged ahead during the second world war, when it became imperative to train large numbers of men and women to reach prescribed standards of proficiency in the shortest possible time. In the very different conditions of peacetime the techniques of teaching have for some time been studied in the light of wartime successes. In particular audio-visual procedures have been devised to give impact to the lesson being taught.

Now the British Medical Association has joined with the Life Offices' Association and the Associated Scottish Life Offices to form the British Life Assurance Trust. The trust deed was signed on 6 October by eight trustees, four representing the two life assurance associations and four the B.M.A. The objects of the trust are to promote the education of the public generally and help the practising medical profession to keep abreast of latent developments in medical technology by encouraging the production and exhibition of audio-visual aids; to distribute such aids; to act as a co-ordinating and advisory body in this field; and to encourage and promote research into the production and effective-