

The radiological aspects have perhaps not been studied as much as they should have been. Occasionally the infarcted segment gives a typical wedge-shaped opacity with its base on the pleura. More often an indefinite shadow appears which is indistinguishable from pneumonia at first, and later shows as a linear scar. Incomplete infarction, which does not progress to necrosis, may give a transient haziness; rarely an area of decreased vascularity suggesting oligæmia has been reported. Large or recurrent emboli may lead to pulmonary hypertension, with distension of the pulmonary artery and its larger branches. The electrocardiogram is not ordinarily affected by pulmonary infarction, but large or recurrent emboli lead to signs of right heart disorder. It is certainly useful in differentiating pulmonary from cardiac pain.

Prophylactic treatment for surgical patients includes the avoidance of immobilization and pressure on the limbs, and early ambulation. Anticoagulant therapy may be advisable for patients with a previous history of thrombophlebitis, and for the elderly with heart disease or trauma of the limbs. Prevention is rather more difficult for some medical patients, but the bedridden should have active and passive movements of the legs, including leg raising, as a routine.

Anticoagulant therapy should be started as soon as thrombophlebitis or pulmonary infarction has occurred or is strongly suspected. There is no longer any doubt of its efficacy. The aim is to limit the thrombus to the peripheral vein until it is organized or absorbed, thus minimizing the risks of a fatal pulmonary embolism or recurrent infarction. Immobilization of the limb, partial or complete, is accompanied by the administration of heparin and a longer-acting anticoagulant until a satisfactory prothrombin time is reached, when the heparin is stopped. Drug treatment is then continued for a period of 10 days up to six months, according to circumstances. Ligation of veins is less often practised than formerly, but is indicated if embolism recurs despite anticoagulant therapy. Supplementary methods of treatment include antibiotics, oxygen for dyspnoea, and routine measures for cardiac insufficiency and shock, should they recur.

Annual Registration Fees

The General Medical Council has informed the Privy Council that it proposes to seek statutory power to charge an annual fee for the retention of a doctor's name on the *Medical Register*. The reasons are set forth in a memorandum which we print at p. 1164 of this issue. A longer version was considered by the B.M.A. Council last year. Briefly the G.M.C. proposes that every doctor (subject to some important exceptions) should pay an annual retention fee of "£2 or thereabouts," and that the existing fees of £9 and £12 for provisional and full registration, respectively, should be reduced to £4 and £6. The annual retention fees would be counted as professional expenses for income tax purposes. If one assumes that a doctor qualifies at 25 and remains on the *Register* until 65 (the proposed age for exemption from the annual fee), how much in fees would the G.M.C. receive from him? "Within the first two years of his qualification the Council would receive £10 for provisional and full registration and in addition, spread over 40 years, a further £80, making a total of £90. This contrasts with the present figure of £21.

Before concurring with the G.M.C.'s proposals the profession—and no doubt the Privy Council too—will want to be satisfied that such a large increase is really necessary. The profession will also wish to be sure that the method recommended for raising the extra money is the best that can be devised. There are three questions. Does the method adequately safeguard the G.M.C. against Government interference? Is it equitable? Is it sound from an administrative point of view?

The G.M.C. has a long record of valuable work in protecting the interests of both profession and public. Since its inception in 1858 it has maintained a *Register* of qualified medical practitioners, supervised standards of medical education and examination, and has exercised a disciplinary function over the profession. It is also responsible for the production and regular revision of the *British Pharmacopoeia*. Under the Act of 1858 the Council was permitted to make a single once-for-all charge for registration, and the fee was fixed at £5. The amount of the fee remained unaltered for nearly a century. As Lord Cohen pointed out in his Hastings Memorial Address (30 April, p. 1098), the method of payment was a last-minute change introduced during the Bill's passage through the House of Lords. It is worth noting that an abortive Bill of 1840, promoted among others by Thomas Wakley, Editor of the *Lancet* and M.P. for Finsbury, did in fact propose an annual fee.

Since 1858 there have been three increases in the fees for registration. Under the Medical Act of 1950 the fees were set at 5 guineas for provisional registration and 6 guineas for full registration. Subsequently under a Privy Council Order the fees were raised to £6 and £12 respectively, and in 1965 to the present level of £9 for provisional registration and £12 for full registration. These increases followed rises in the cost of running the G.M.C., with its Branch Councils in Edinburgh and Dublin: in 1948 the sum was £22,763, in 1956 £46,965, and in 1964 £95,133—a fourfold increase in 16 years. The estimated cost for 1972 is £168,000, which the Council suggests may be on the low side. It must be remembered that between the years 1938 and 1964 the £ fell to a third of its former value. In addition to the effect of the general rise of costs, the Council ascribes its increased expenditure to the extra activities which have fallen to it as a result of the 1950 Act, in particular provisional registration. The Council finds its present income inadequate, with little prospect of increasing it appreciably. The considerable income derived since the war from the registration of foreign and Commonwealth doctors is now declining. For the period 1965–72 an independent accountant has forecast a cumulative deficit in the region of £200,000.

Apart from the amount of new money, there is the question how it should be raised. The G.M.C. has turned down flatly the idea of a Government subsidy: "The Council are strongly of the opinion that it would not be right to entertain any scheme involving the receipt of a Government subvention." Doctors will welcome this clear statement of principle. The Council also decided against charging annual retention fees to newly registered practitioners only. Such a charge on the younger members of the profession would be "manifestly inequitable" and would not produce sufficient money quickly enough. The method the Council has finally chosen—reduced initial registration fees and a tax-deductible annual retention fee for all except those who are non-resident, over the age of 65, or retired permanently because of ill-health—seems in the circumstances reasonable. Certainly other Medical Councils elsewhere in the Commonwealth and

almost all similar professional bodies in this country levy an annual fee—for example, architects pay 30s., dentists £5, veterinary surgeons £5 5s., solicitors £11. Against a background of continual inflation the once-for-all fee is an anachronism; it condemns the newly qualified practitioner to bearing the whole burden of rising costs, which is clearly unfair. Annual fees seem inescapable, but their level will always need to be watched closely.

Atopy not all Allergy

The idea that the special type of antibodies usually known as reagins are the sole cause of hay-fever, asthma, and atopic dermatitis has undergone some modification. In hay-fever the reagins do have a predominant role, and they do also in some cases of atopic asthma. Their significance in atopic dermatitis is much less clear, although they may be detected in about 70% of all cases.^{1,2} Despite the fact that some patients with atopic dermatitis find that exposure to substances to which they are allergic may cause itching, and, if they scratch, a flare-up of their dermatitis, they are usually aware that exacerbations are more likely to be correlated with emotional disturbances, climatic changes, or sweating.

Various other abnormalities, sometimes called the stigmata of atopy,³ may be found in these patients and cannot easily be explained on the basis of an allergic reaction. One of the most interesting is a tendency to vasoconstriction. Pallor of the skin in children with infantile eczema has often led to the unwarranted diagnosis of anaemia. A. Whitfield⁴ showed that white dermographism, or a pronounced white reaction after firm stroking of the skin, readily occurs in atopic dermatitis and also some other inflammatory skin diseases. The temperature of the fingers is also lower than normal but hypertension is not more common. More remarkable is the paradoxical vasoconstriction of the skin which occurs when acetylcholine, or more conveniently methacholine, is injected intradermally into the skin—the delayed blanch of W. C. Lobitz and C. J. Campbell.⁵ After injection of methacholine at a concentration of 1 in 1,000 to 1 in 5,000 an area of blanching may be seen to spread out from the injection weal after an interval of a half to five minutes. This occurs in 70% of all cases of atopic dermatitis, considerably less frequently in other atopic disorders,⁶ and only rarely in normal persons. Its mechanism remains a mystery, but abnormal binding and release of adrenaline and noradrenaline can be detected in these patients.^{7,8}

It has recently been shown that this phenomenon can occur in patients with infantile eczema and even in the newborn,⁹ which is further evidence that it is not secondary to the dermatitis or to an allergic reaction. It seems more likely that it reflects the unknown changes which make atopic persons more likely to produce reaginic antibodies and to show the other stigmata of atopy.

The delayed-blanch phenomenon may have some usefulness as a diagnostic test of atopy, though in this respect it is often disappointing. Clear-cut positive or negative results are not always obtained, especially in those cases where help is most needed.¹⁰ The recognition of the vascular abnormalities has not materially influenced therapy, though treatment of atopic dermatitis with guanethidine has been suggested.¹¹ Perhaps the greatest service that these vascular changes can perform is to draw our attention away from the concept that all atopic diseases are purely allergic disorders.

Preparation for Parenthood

Two inquiries carried out by the Research Committee of the Royal College of Midwives between 1961 and 1965 are reported in a pamphlet published last week.¹ The first inquiry was into the extent of organized classes in England and Wales giving preparation for parenthood, and it showed that on the whole they were well distributed throughout the country. Teaching was mainly done by midwives, but health visitors and physiotherapists also took a considerable share of the work. In only 10% of the hospitals were husbands invited to come, and then very few attended. The second inquiry elicited information from 1,230 mothers and 284 expectant mothers awaiting the birth of their first baby. Information was also obtained from group discussions in London, Bristol, and Sheffield. The result was to produce much information of interest to all who are concerned with the care of pregnant women.

Many of the young women were found to be ignorant of the physical and mental features of childbirth. Some were approaching the start of a family in fear of having a baby. Not surprisingly, the inquiry showed that the general atmosphere and attitudes expressed in antenatal clinics are exceedingly influential in forming the woman's emotional reactions to the prospect of childbirth. Early confirmation of pregnancy was also found to be of great importance to many of the young women. Antenatal classes were regarded as helpful, and while most of the 9 in 10 women who received an analgesic during labour welcomed it a few felt that they had been too heavily drugged. It is perhaps a sign of the times that the presence of the father at the birth was generally appreciated. Fathers who were not allowed to attend or who were dismissed by members of the nursing staff were apt to feel that they had missed something very important. It was found that most mothers needed help with breast-feeding and that 53% were still feeding their babies when interviewed during the 28 days after birth. Many of the mothers on returning home with their new baby knew very little about the help they can get from doctors and health workers, and the report recommends that more education should be available for young parents and that expert help should be more readily available for the mothers on returning home.

The Royal College of Midwives are to be congratulated on producing this unusual and enlightened report on the problems of parenthood in present-day society. It is clear that while many of the medical hazards have been drastically reduced in recent decades much remains to be done to enhance the well-being of the pregnant woman and young mother.

¹ Royal College of Midwives, *Preparation For Parenthood*, 1966. London.

¹ Rajka, G., *Acta derm.-venereol.* (Stockh.), 1960, **40**, 285.

² ——— *ibid.*, 1961, **41**, 363.

³ Kierland, R. R., *Amer. Practit.*, 1955, **6**, 1089.

⁴ Whitfield, A., *Brit. J. Derm.*, 1938, **50**, 71.

⁵ Lobitz, W. C., and Campbell, C. J., *Arch. Derm. Syph. (Chic.)*, 1953, **67**, 575.

⁶ West, J. R., Johnson, L. A., and Winkelmann, R. K., *Arch. Derm.*, 1962, **85**, 227.

⁷ Juhlin, L., *J. invest. Derm.*, 1961, **37**, 201.

⁸ Solomon, L. M., Wentzel, H. E., and Tulsy, E., *ibid.*, 1964, **43**, 193.

⁹ Johnson, L. A., and Winkelmann, R. K., *Arch. Derm.*, 1965, **92**, 621.

¹⁰ Champion, R. H., *Brit. J. Derm.*, 1963, **75**, 12.

¹¹ Solomon, L. M., *Canad. med. Ass. J.*, 1964, **90**, 644.