

in effect, monitors the success of part of this effort by dealing with claims for work related (prescribed) diseases and certain dust diseases. Some of that information is passed back to the Employment Medical Advisory Service. Most cases for re-settlement are untouched unless they come within the scope of the Disabled Persons (Employment) Act, which is operated by the Manpower Services Commission, which gets medical advice from the Employment Medical Advisory Service. Alongside all this the larger organisations in both the public and the private sector have their own independent occupational medical services.

What of the Employment Medical Advisory Service? Two recent *BMJ* letters—one from the chairman of the BMA Occupational Health Committee,³ the other from the past president of the Society of Occupational Medicine⁴—suggest that all is not well. The Employment Medical Advisory Service was the imaginative idea of Dr Lloyd Davies in the Department of Employment. He saw that occupational medicine had more to offer than the Victorian concept of medically qualified inspectors of factories. The Employment Medical Advisory Service was to be a nationwide, independent medical service available to give advice to government departments, government agencies, firms, employers' organisations, trades unions, and individual workers on all medical problems connected with employment. At that time the Department of Employment embraced factory inspection, employment matters, and industrial relations. Lloyd Davies's idea was that the independent medical advisory service would provide medical advice on all these functions, so that for the first time in Britain there would be a professional service capable of giving medical advice relating to all forms of employment.⁵

In the early '70s both the government and the opposition foresaw that the Employment Medical Advisory Service might not always remain associated with the Department of Employment.⁶ The government argued that when the NHS was reorganised the proper home for the Employment Medical Advisory Service would need to be looked at again by the departments concerned. That view was supported by the then opposition front bench spokesman, Dr David Owen, who stated that "This is where the reorganisation of the Health Service becomes of major significance. An area health board could take responsibility for occupational health just as much as it is now planned it will take the new responsibility for community health, and in areas of high industrial development I believe that an area health board should have a specialist in occupational health."⁷

The passing of the Health and Safety at Work Act appears to have eclipsed that undertaking. The Health and Safety Commission and its executive were established outside the Department of Employment and took the Employment Medical Advisory Service with them—back among the inspectors who operate the Health and Safety Act. Other parts from the Department of Employment moved out to become the Manpower Services Commission, Advisory, Conciliation, and Arbitration Service, and so on. The Employment Medical Advisory Service is left providing medical advice from inside the Health and Safety Executive and not as an independent medical advisory service. Could the Employment Medical Advisory Service operate satisfactorily from outside the Health and Safety Executive? There may be differing views, but we should remember that, just as the Health and Safety Commission has statutory responsibility for occupational health, the local authorities have statutory responsibilities for environmental health. In the 1974 reorganisation of the Health Service and local government their

medical officers were moved into the NHS. That has not been an unqualified failure, and the recent reorganisation of the NHS saw no demand for them to be moved back again out of the mainstream of medicine.

Occupational medicine—as its practitioners have shown—has a core of knowledge and skills to justify its emergence as a specialty. Yet the organisation of occupational medical services, both statutory and non-statutory, is still uneven and sporadic. One consequence is that, while the faculty attempts to establish standards of training, no organisation takes on the responsibility for providing training posts, as the DHSS does for other specialties. Much remains to be done, and it is encouraging to know that a subcommittee of the House of Lords is presently looking at the subject.

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¹ British Medical Association. *The doctor in industry*. London: British Medical Association, 1980.

² Employment Medical Advisory Service. *Occupational health services. The way ahead*. London: HMSO, 1978.

³ Kearns JL. Employment Medical Advisory Service. *Br Med J* 1983; **286**:1286.

⁴ Tyrer FH. Employment Medical Advisory Service. *Br Med J* 1983; **286**:1444.

⁵ Davies TAL. Employment Medical Advisory Service. *Health Trends* 1973; **5**:45-7.

⁶ House of Commons. *Official Report (Hansard)* 1971 December 13; **828**: col 126.

⁷ House of Commons. *Official Report (Hansard)* 1971 December 13; **828**: col 165.

Flushes in women—and men

Hot flushes are the most common symptoms of the menopause, being found in at least 70% of women,^{1 2} and causing many of them considerable distress. The flushes may be no more than intermittent over a few weeks—but they may persist for years. The Victorian view³ that "robust women of a sanguine temperament are more troubled with flushes" contrasts with more recent reports^{4 5} that professional women and those active outside the home have fewer and less severe climacteric symptoms than housewives, particularly in the lower socioeconomic groups.

A hot flush is essentially a vascular phenomenon. It is difficult to study, both because of the rapidity of the circulatory response and because women who claim they flush frequently may not always do so in the laboratory. Nevertheless, plethysmographic techniques have shown that an appreciable rise in blood flow in the hand occurs with the onset of symptoms.⁶ The increased flow is sustained over three to four minutes and then falls to control levels six to seven minutes after symptoms have abated. Blood flow in the forearm and the pulse rate rise simultaneously but to a less extent and for a shorter time, falling to control levels while hand flow is still raised. The blood pressure remains unchanged during the flush. The pattern of circulatory response during the flush (which indicates a substantial increase in blood flow in the skin), the sensation of increased heat, the sweating, and the fact that women often feel warmer after the menopause than before (even if they do not experience hot flushes) suggest a disturbance of thermoregulation at this time, though the aetiology is unknown.

Gonadotrophins have been implicated in the genesis of the

flush. Their concentration is raised in menopausal women; and oral oestrogens both alleviate menopausal flushing and induce a fall in gonadotrophin concentrations. The observation of a pulse of luteinising hormone between seven and 13 minutes after the onset of symptoms has also been cited as evidence of the part played by gonadotrophins in the response.^{7 8} A luteinising hormone pulse is not invariable after the flush, however, and administration of luteinising hormone (or of gonadotrophin releasing hormone which releases luteinising hormone) does not evoke a hot flush even in susceptible subjects.⁶ Furthermore, there is no correlation between the severity of hot flushes and gonadotrophin concentrations in individual women or between the alleviation of symptoms by oestrogens and the extent of the reduction they induce in gonadotrophin concentrations. Indeed, a dissociation between gonadotrophin concentrations and hot flushes has been shown in different circumstances. Thus flushes continued unabated in menopausal women⁹ and were even induced in premenopausal women¹⁰ after administration of a gonadotrophin releasing hormone agonist, though gonadotrophin concentrations fell and luteinising hormone pulses were abolished. Conversely treatment with vaginal oestriol alleviated hot flushes but gonadotrophin concentrations remained raised (unpublished observations).

Treatment, then, remains essentially empirical. Oestrogens—natural or synthetic—reduce the severity and frequency of attacks in a high proportion of women. Their mode of action is unknown. The addition of a progestogen, given for part of the month to ensure regular withdrawal bleeding and so limit endometrial hyperplasia, may be associated with unacceptable side effects. Women intolerant of oestrogens or in whom they are contraindicated may be helped by compounds which influence vascular responsiveness. Clonidine—an alpha agonist—may reduce the severity of the hot flushes.¹¹ A beta blocker such as propranolol may also help and may be given in conjunction with the clonidine.

Why some women do not flush after the menopause while others may suffer for years is not understood. That particularly severe and intense flushes occur after bilateral oophorectomy or when oestrogen treatment is abruptly discontinued suggests that a sudden change in the hormonal balance may trigger a hypothalamic discharge. It is therefore of interest that, though there is normally no parallel in men to the considerable reduction in oestrogens occurring in women with the menopause, attacks of flushing have been reported in men after an abrupt fall in androgens, as after orchidectomy^{12 13} or after administration of a gonadotrophin releasing hormone agonist.¹⁴ Measurement of vascular responses during such an attack in a man after orchidectomy showed a striking similarity to those recorded during menopausal flushing in women p 262.

In both men and women, therefore, a reduction in sex steroids consequent on gonadal failure may herald the onset of the vasomotor dysfunction characterised by the climacteric hot flush. Is the signal for the initiation of these flushes a fall in the dominant sex steroid for the gonad in question? Or might it be lack of another, as yet unidentified, compound common to both ovary and testis and in whose absence activity of the hypothalamic centres regulating temperature is disturbed?

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¹ Thompson B, Hart SA, Durno D. Menopausal age and symptomatology in general practice. *J Biosoc Sci* 1973;5:71-82.

² McKinlay SM, Jeffreys M. The menopausal syndrome. *British Journal of Preventive and Social Medicine* 1974;28:108-15.

- ³ Tilt EJ. *The change of life in health and disease*. London: J A Churchill, 1857.
- ⁴ Van Keep PA, Kellerhals JM. The impact of socio-cultural factors on symptom formation. Some results of a study on ageing women in Switzerland. *Psychother Psychosom* 1974;23:251-63.
- ⁵ Flint MP. Sociology and anthropology of the menopause. 1-9. In: Van Keep PA, Serr DM, Greenblatt RB, eds. *Female and male climacteric*. Lancaster: MTP Press Limited, 1979.
- ⁶ Ginsburg J, Swinhoe J, O'Reilly B. Cardiovascular responses during the menopausal hot flush. *Br J Obstet Gynaecol* 1981;88:925-30.
- ⁷ Casper RF, Yen SSC, Wilkes MM. Menopausal flushes: a neuroendocrine link with pulsatile luteinizing hormone secretion. *Science* 1979;205:823-5.
- ⁸ Tataryn IV, Meldrum DR, Lu KH, Frumar AM, Judd HL. LH, FSH and skin temperature during the menopausal hot flush. *J Clin Endocrinol Metab* 1979;49:152-4.
- ⁹ Casper RF, Yen SSC. Menopausal flushes: effect of pituitary gonadotrophin desensitization by a potent luteinizing hormone-releasing factor agonist. *J Clin Endocrinol Metab* 1981;53:1056-8.
- ¹⁰ DeFazio J, Meldrum DR, Laufer L, et al. Induction of hot flushes in premenopausal women treated with a long-acting GnRH agonist. *J Clin Endocrinol Metab* 1983;56:445-8.
- ¹¹ Clayden JR, Ball JW, Pollard P. Menopausal flushing: double-blind trial of a non-hormonal medication. *Br Med J* 1974;i:409-12.
- ¹² Feldman JM, Postlethwaite RW, Glenn JF. Hot flushes and sweats in men with testicular insufficiency. *Arch Intern Med* 1976;136:606-8.
- ¹³ Steinfeld AD, Reinhardt C. Male climacteric after orchiectomy in patient with prostatic cancer. *Urology* 1980;16:620-2.
- ¹⁴ Linde R, Doelle GC, Alexander N, et al. Reversible inhibition of testicular steroidogenesis and spermatogenesis by a potent gonadotrophin-releasing hormone agonist in normal men: an approach toward the development of a male contraceptive. *N Engl J Med* 1981;305:663-7.

Manpower problems

Rheumatology¹ has now joined gastroenterology,² cardiology,³ and chest medicine⁴ in the growing list of medical specialties whose senior registrars are having difficulty in obtaining consultant appointments. Five or more years ago anyone who specialised in rheumatology could become a consultant sooner than his or her colleagues in most other medical disciplines; even more recently there were unfilled posts in chest disease. If the trend continues, there are likely to be senior registrars queueing for vacancies even in the traditionally unpopular specialties such as genitourinary medicine and geriatrics. General (internal) medicine, surgery, and obstetrics and gynaecology have long been oversubscribed; now psychiatry and anaesthetics, whose capacity to absorb junior staff seemed limitless, are beginning to get uncomfortably full. Only radiology and some branches of pathology (though not haematology) still appear to have spare capacity.

The Short committee⁵ did a valuable service in highlighting the shortcomings of the career structure, but its proposed doubling of the number of consultants and reducing supporting junior staff was unrealistic in a period of recession—and was generally unacceptable to the profession. What is more, it did not really address the complex question of why deployment of medical manpower in the hospital service is in such a mess. For example, the National Health Service has been plagued by the problem of time expired senior registrars—those who have completed the customary four years of training—since its inception, and not, as the committee suggested, for the last few years. One of the initiatives in setting up the British Medical Association's Hospital Junior Staff Committee in the 1950s came from registrars who were dissatisfied with their prospects. In those days the discontented and overlooked senior registrar could sidestep into other specialties, including general practice, or seek greener pastures abroad; nevertheless, there are senior consultants in Britain today who once suffered