EDITORIAL

Medication for the menopause?

HOMO sapiens is the only mammal which has a natural menopause. The menopause is defined as the time when a woman's periods stop, whereas the climacteric, which is biologically comparable with adolescence, covers the whole phase during which ovarian function and oestrogen production wane.

Menstrual bleeding will not occur when oestrogen production is less than 100 mg a day, although postmenopausal women continue to produce oestrogen by conversion of androstenedione to oestrone but at a level which is not enough to stimulate oestrogen activity.

The median age of the menopause in a sample of 736 women near London was found to be 51 years (McKinlay *et al.*, 1972).

The menopause is a natural occurrence and an accepted time of adjustment. Why then need it be treated, especially at a time when Illich (1975), is challenging so vigorously the medicalization of life events? Some of the drugs have significant adverse effects and all of them generate considerable cost through their long-term use. The problem with the menopause lies in the symptoms which are associated with this 'time of life' and the fact that large numbers of women come to general practitioners seeking relief.

The classic symptoms are those of vasomotor instability, such as hot flushes, sweating, dizziness, and paraesthesiae; those of emotional instability, which include fatigue, depression, and sometimes reduction in sexual responsiveness; and local symptoms such as atrophy of the genitalia, atrophic vaginitis, which is associated with reduction of tissue glycogen. Other medical menopausal consequences may arise through an increased prevalence of hypertension and a reduced density of bones. The commonest symptom is 'flushing'.

The case for treating the menopause with hormones rests on the evidence that reduction in plasma oestrogen can be measured, that giving oestrogen raises the plasma oestrogen level, and that symptoms are reduced (Daw, 1974). Longstanding clinical experience in general practice confirms that the synthetic oestrogens are effective symptomatically; the problems of their use relate not to effectiveness but to adverse effects, especially thromboembolism (Inman and Vessey, 1968; Vessey and Doll, 1969).

Before beginning oestrogen therapy at all it is important to observe the well known contraindications of marked obesity, a history of hypertension, previous thromboembolic disease, liver disease, or carcinoma of the female genital tract.

Smith and his colleagues (1975) have shown an association between the use of exogenous oestrogen and an increased risk of endometrial carcinoma and it should also be remembered that oestrogen therapy can alter many biochemical tests, including, for example, several thyroid function tests. Thus, both serum thyroxine (T4) and the thyroid hormone uptake test (THUT) may be affected.

Choice of preparation

Once it has been decided that medication is appropriate, the general practitioner has to decide between using synthetic oestrogens, such as ethinyl oestradiol, stilboestrol, mestranol, or quinestradol, or the so-called 'natural' oestrogens which occur in living tissues. The three which are most commonly used are conjugated equine oestrogen ('Premarin'), oestradol valerate 2 mg ('Progynova'), or piperazine oestrone sulphate 3 mg ('Harmogen'). It had been hoped that the natural oestrogens would have fewer adverse effects, but Coope and her colleagues (1975) in a double-blind study reported that equine oestrogens raised extrinsic clotting factors and accelerated the prothombin time. More recently, Aylward and his team (1976) reported that these effects did not occur with piperazine oestrone sulphate, so the next step was to determine whether this chemical was as effective at ethinyl oestradiol. The General Practitioner Research Group (1977) has now found no clinical difference, and concludes that piperazine oestrone sulphate ('Harmogen') "is clearly the preferred preparation on the grounds of safety for the treatment of the menopause." Gomez (1977) confirmed this.

The future

What may well prove to be more important than many of these medical findings, however, will be the attitude of the menopausal women of Britain. In the early 1960s similar studies were being reported for and against the use of hormonal oral contraceptives. Today one quarter of all women of childbearing age in Britain are taking the Pill and thus are on regular doses of oestrogen.

The social and medical significance of such mass oestrogen medication has not yet even begun to be appreciated. It is still an open question whether the two and a quarter million women who choose to solve their

© *Journal of the Royal College of General Practitioners*, 1977, 27, 579-581.

contraceptive requirements through oral oestrogens will in the future wish to solve their menopausal problems in an analogous way. Certainly if they do there may be a considerable impact on the primary health care teams, because all agree that the follow-up care of such women should be similar to that now provided as a routine for patients taking oral contraceptives, and should comprise a six-monthly check on weight and blood pressure, and periodic pelvic examinations.

It seems at present that if an oestrogen is to be used then piperazine oestrone sulphate ('Harmogen') is the preparation associated with the fewest theoretical problems and hence now becomes the drug of choice. Beard (1977) suggests using it for six months to two years, while Studd (1976) contemplates treatment for a decade. Many general practitioners halve the dose after the first month for long-term maintenance.

Clearly there is an urgent need for further long-term studies in general practice, to determine the prevalence of the symptomatology, the natural history, the effectiveness of the treatment, and the incidence of adverse effects.

References

Aylward, M., Maddock, J. & Rees, P. (1976). *British Medical Journal*, **1**, 220.

Beard, R. (1977). *Modern Geriatrics*, **6**, 18-22.

Coope, J., Thomson, J. M. & Poller, L. (1975). *British Medical Journal*, **4**, 139-143.

Daw, E. (1974). *Current Medical Research Opinion*, **2**, 256-259.

General Practitioner Research Group (1977). *The Practitioner*, **218**, 573-579.

Gomez, G. (1977). *Clinical Trials Journal*, **14**, No. 2, 65-70.

Illich, I. (1975). *Medical Nemesis*. London: Calder & Boyars.

Inman, W. H. W. & Vessey, M. P. (1968). *British Medical Journal*, **2**, 193-199.

McKinlay, S., Jeffreys, M. & Thompson, B. (1972). *Journal of Biosocial Science*, **4**, 161-173.

Smith, D. C., Prentice, R., Thompson, D. J. & Herrmann, W. L. (1975). *New England Journal Of Medicine*, **193**, 1164-1167.

Studd, J. (1976). *Prescribers' Journal*, **16**, 51-58.

Vessey, M. P. & Doll, R. (1969). *British Medical Journal*, **2**, 651.

The community hospital: a three-year study

In a three-year period a community hospital of 40 beds discharged 2,086 patients, their mean length of stay being 14·8 days. Some 68 per cent of the patients treated were over 65, and 8·9 per cent died in hospital. While the most common diagnosis on admission was disease of the respiratory tract, this does not indicate the actual cause of admission. For 142 patients from one practice this was acute illness in 44 per cent of the cases, assessment in 20 per cent, and a need for nursing care in 36 per cent. If the community hospital had not been available about half these patients would have been admitted to the general hospital.

Reference

Kernick, D. P. & Davies, S. E. (1976). Authors' summary. *British Medical Journal*, **2**, 1243-1245.

JOURNAL OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON

This Journal is concerned with the integration of scientific disciplines in the practice of medicine and, by providing a wide ranging commentary on the growing points of medicine, is an essential complement to the specialized journals.

CONTENTS OF VOLUME 12, NO. 1

H. G. Benraad, H. J. Penn, G. F. M. Pieters and H. S. Tan	Zieve's syndrome.
L. Bertrand	L'hepatite alcoolique aigue.
J. Cambier, R. Dairou and M. Gonce	Encephalopathie de Gayet-Wernicke.
L. Demeulenaere and L. Van Waes	Liver cirrhosis in alcoholics.
J. F. Goodwin	Alcohol and the heart: alcoholic cardiomyopathy.
N. Krasner	Alcohol and the gastrointestinal tract.
A. G. H. Smals	Alcohol-induced Cushingoid syndrome.
J. D. Blainey	Changing patterns of renal medicine.
Jo Grimmond	The future of individual liberty.
C. P. Mustchin	Carbon dioxide rebreathing and mouth occlusion pressure measurements.
C. D. R. Pengelly	The influence of splenomegaly on red cell and plasma volume.
A. G. W. Whitfield	The last illness of the Prince Consort.
Gweneth Whitteridge	Some Italian precursors of the Royal College of Physicians.

Editor:	A. Stuart Mason, MD, FRCP
Publication:	Published quarterly in October, January, April and July.
Subscription:	UK and Republic of Ireland £10 p.a. (including postage). Other countries £12 or $25 (including postage).
All inquiries to Editorial Office:	Royal College of Physicians of London, 11 St Andrew's Place, Regent's Park, London NW1 4LE.
Publishing Office:	Pitman Medical, 42 Camden Road, Tunbridge Wells, Kent TN1 2QD.