

Van die Redaksie/Editorial

Obstetrics and gynaecology — prevention is better than cure

If a woman is fainting from metrorrhagia, do not be in a hurry to give stimulants, let her faint and the haemorrhage will probably moderate immediately.

SAMJ, 30 June 1888

We have come a long way from those days of therapeutic nihilism, particularly in the field of obstetrics and gynaecology, in which it is nowadays much easier to do too much rather than too little.

Technology has advanced to such an extent that procedures which the writer of the above quotation could not even begin to guess at are now possible. The *SAMJ* publishes two or three issues a year dealing exclusively with obstetrics and gynaecology, and in this issue we publish 11 papers: 3 on gynaecology, 2 on tubal ligation, which falls between gynaecology and family planning, and 6 on obstetrics.

The papers on tubal ligation cover the changes in the fallopian tube after bipolar cauterization, and the incidence of pregnancy after tubal occlusion. One of the most significant statements made in these papers is that although tubal occlusion is considered a permanent form of contraception, patients should be informed that a small percentage may become pregnant after the procedure, irrespective of which method of tubal occlusion is used. The importance of this cannot be overemphasized as there is undoubtedly a widespread impression among women who undergo this operation that it is 100% effective, and failures can provoke considerable resentment and emotional disturbance leading to demands for termination, which could have been avoided if the true position had been explained pre-operatively.

The paper on the management of eclampsia emphasizes yet again, if any further emphasis were needed, the vital

importance of antenatal care in the avoidance of eclampsia (or indeed any obstetric complication). Good antenatal care remains the cornerstone of safe obstetrics; the management of eclampsia has improved considerably over the past few years, but it remains a lethal condition which is far better prevented, and this will not be possible until antenatal services are improved and extended. Eclampsia is avoidable, and that there should have been 67 cases in one hospital over a 1-year period with 8 deaths is a cause for great concern.

Since antenatal care in many areas is so sketchy, and since funds appear to be so limited, what can be done to improve these facilities? A possible answer is provided by the two papers dealing with traditional birth attendants (TBAs) who, although they may be untrained and may carry out some procedures unacceptable to modern obstetrics, also have some surprisingly good ideas and could well be retrained in the light of present-day knowledge. This is not a new idea; it was first tried in the Sudan in 1921,¹ and further attempts at training have been analysed by the World Health Organization.² Most of the schemes in the Third World ran into difficulties, but these appeared to have been related more to lack of funds, lack of organization and inadequate supervision than to the quality of the TBAs involved, and indifferent results elsewhere should not discourage attempts to establish similar schemes in South Africa. TBAs conduct as many as 80% of all deliveries in the Third World, and it makes sense to utilize and improve an already existing service.

1. Leading Article. Why retrain traditional birth attendants? *Lancet* 1983; *i*: 223-224.

2. Mangay-Maglacas A, Pizurki H, eds. *The Traditional Birth Attendant in Seven Countries: Case Studies in Utilization and Training*. Geneva: World Health Organization, 1981.

Estrogeenvervanging in die menopouse

Behoort estrogeen aan postmenopousale vrouens gegee te word? Indien wel, vir watter aanduidings, in watter dosis, en vir hoe lank? Aan watter vrouens moet estrogeen onder geen omstandighede gegee word nie? Oor al hierdie vrae is daar in die afgelope paar jaar vurig gedebateer, en die praktiserende dokter word vergewe as hy ietwat in die war verkeer as gevolg van hierdie botsende opinies.

Die Raad oor Wetenskaplike Sake van die Amerikaanse

Mediese Vereniging het gevolglik al die bewyse teen mekaar opgeweeg en onlangs 'n gedetailleerde verklaring oor alle aspekte van die probleem uitgereik. Hulle begin deur die voordele te bespreek, waarvan die eerste die voorkoming en arres van postmenopousale osteoporose is.

Van al die Amerikaanse Blanke vrouens (nie Swart vrouens nie) sal 25% 'n vertebrale kompressiefraktuur na die ouderdom van 60 jaar kry, en baie sal 'n heupfraktuur

kry. Vervanging van estrogeen stuit of verminder beenresorpsie, maar vervang nie verlore weefsel nie; dit sal mees effektief wees as dit gegee word voordat merkbare beenverlies intree, en profilakse sal kleiner dosisse estrogeen vereis. Die voordelige effek op atrofie van die genito-urinêre weefsel wanneer estrogeen mondeliks of topies gegee word, word bewys, asook die effek in die vermindering van die intensiteit en die voorkoms van warmgloede.

Ander voordele is nog steeds aanvegbaar. Estrogeen mag moontlik help om miokardiale infarksie na die menopouse te verhoed deur miskien die hoë digtheid lipoproteïenvlak in die serum te verhoog, maar hierdie kwessie is nog nie bevestig nie.

Die belangrikste risiko van langdurige estrogeengebruik na die menopouse is die ontwikkeling van endometriale kanker, maar hier weer stem die resultate van epidemiologiese studies nie totaal ooreen nie. Die Raad kom tot die gevolgtrekking dat: (i) dit nie die voorkoms van endometriale kanker merkwaardig verhoog nie; en (ii) dit nie die mortaliteit van hierdie siekte verhoog nie. Daar mag aanvaar word dat, totdat meer bewyse beskikbaar is, alle estrogene hierdie effekte inhou. Dit skyn egter asof die risiko vir kankerontwikkeling verminder word deur progestien vir 7-10 dae tot die sikliese estrogeenregimen by te voeg.

Uteriene bloeding is 'n algemene komplikasie van estrogeentoediening en moet altyd as abnormaal en as 'n aanduiding vir diagnostiese skraping beskou word. Selfs in sy afwesigheid beveel die Raad die jaarlikse ondersoek van 'n sitologiese smeer en moontlik 'n jaarlikse endometriale biopsie aan, tesame met pelvisse en borsondersoeke asook kontrolering van bloeddruk.

'n Wye reeks van sistemiese effekte is al toegeskryf aan die instandhouding van hoë estrogeenvlakke soos bv. galblaasiektes, tromboëmboliese siektes, hepatiese adenome, en hipertensie, maar hierdie bewyse kom van epidemiologiese studies op jonger vrouens wat mondelike voorbehoedmiddels geneem het en kan nie op postmenopousale vrouens van toepassing gemaak word sonder verdere ondersoek nie. 'n Verwantskap tussen borskanker en postmenopousale estrogeenterapie is nog nie bewys nie, maar die Raad wys daarop dat hierdie terapie beslis teenaangedui is vir pasiënte met 'n estrogeen-afhanklike borsneoplasma of 'n geskiedenis van so 'n letsel.

Wanneer daar 'n besluit oor estrogeenvervanging in 'n individuele geval geneem moet word, moet die dokter en die pasiënt 'n beslissing maak wat op 'n beraming van voordele en risiko's gebaseer is. Soos met ander middels moet estrogene slegs gebruik word vir aanduidings waar 'n respons verwag kan word, in die kleinste effektiewe dosis en vir die kortste tydspanne wat vir terapeutiese behoeftes voldoende is. Daar moet ook onthou word dat topiese estrogene geredelik deur die intacte maar atrofiese epiteliale oppervlakte van die genitale traktus geabsorbeer word, en dat hierdie tipe van toediening gevolglik tot ophoping kan lei.

Die Raad se verklaring openbaar 'n versigtige optimisme oor estrogeenvervanging, en laat dit oor aan die dokter om die behoefte en die risiko's van elke pasiënt te bepaal.

1. AMA Council on Scientific Affairs. Estrogen replacement in the menopause. *JAMA* 1983; 249: 359-361.

Nausea and vomiting in pregnancy — is there a dietary component?

Vomiting in early pregnancy has been noted for many centuries. In a review of the subject, Fairweather¹ states that it was first described in a papyrus dated about 2000 BC; Hippocrates mentioned it, and Sonorus, who practised medicine at the time of the emperors Trajan and Hadrian just before the time of Galen, gave detailed instructions on treating it by diet, medication and exercise. In 1779 Smellie thought that the condition was best relieved by bleeding and purging, and that the consumption of a 'light, nutritive diet with moderate exercise in a free, open air will conduce to the removal of the complaint'. A century later interest in the aetiology of the condition led to the formation of many theories, including reflux, neurosis and toxæmia. Since then, endocrine, allergic and psychosomatic factors have been recognized in its causation.

The roles of adrenocorticotrophic hormone, progesterone and oestrogens have been considered as endocrine factors, and recently the role of human chorionic gonadotrophin (HCG) has been re-examined in an attempt to resolve the conflicting results of earlier

studies.² The authors concluded that no relationship was apparent between HCG (and 17-hydroxyprogesterone) and severe nausea and vomiting in pregnancy. According to Fairweather¹ an allergic factor was first suggested in 1926. The commonness of an allergic history in patients with the condition had been reported by others, and desensitization and antihistamine drugs have been used in the treatment. Psychosomatic factors were first mooted in 1888, and these included feelings of repudiation of the pregnancy and of femininity generally.^{1,3} Several studies associated the condition with women who have immature personalities, sexual difficulties and poor socio-economic backgrounds.^{1,4,5} Doubtless a psychological element exists, and possibly a combination of all three factors mentioned gives a more realistic aetiological picture. It has also been postulated that an allergen of an endocrine nature is involved.⁶ Adrenocortical insufficiency leading to histamine sensitivity¹ and an immunoregulatory role for gonadotrophic hormone have been suggested.^{7,8} Perhaps women with a history of allergic disease are more at risk than others of having a placental or cortical impairment

yielding abnormal hormone levels. These may be manifested by the symptoms of nausea and vomiting, and are more severe in those with a personality trait conducive to the condition.

As many as 50-80% of Western women are affected, and the condition is seen as an inevitable part of pregnancy by most women and doctors.⁹ Varying in duration and severity from mild nausea in the morning to intermittent vomiting throughout the day, the phenomenon is generally thought not to be influenced by parity, although the incidence has been reported to be higher in primigravidas, women with multiple pregnancies and those who have had a previous unsuccessful pregnancy.¹ It seems that the incidence is not markedly affected by race, although this is controversial. In some ethnic groups the condition appears to be almost unknown, but in South Africa Black and White women have been reported to be similarly affected.¹⁰

What of abnormalities of diet in pregnancy? Little is known about the psychological or metabolic significance of cravings and aversions. In 1978 Hook¹¹ noted in a study of 250 pregnant women that coffee was one of the most prominent rejected foods. Cravings and aversions are generally thought to be psychological in origin, and to show a desire for attention on the part of the mother. Notwithstanding this, it is interesting to speculate that aversion to some foods may have an additional physiological basis and could perhaps affect the fetus, and be manifested even in the infant after birth. This could take the form of a feeding problem in infancy. It is recognized that feeding problems such as vomiting, regurgitation of feeds, colic, reluctance to feed and irregular bowel actions can be symptomatic of infants with sensitivity to certain foods, particularly cow's milk.¹² In cow's milk allergy (which may affect 1-3% of infants) a family history of allergic disease is common.¹³ Early introduction of cow's milk tends to increase the likelihood of sensitization, which may possibly occur *in utero* or during lactation. Evidence for intra-uterine sensitization has been put forward in connection with some food allergens.^{14,15} One of the ramifications of this could be nausea and vomiting.

Recently, in a retrospective investigation on 'Persistent nausea and other variables in pregnancy — a possible association with cow's milk allergy in infants',^{16,17} children with well-defined cow's milk allergy were studied with regard to their history of feeding problems, and to the diet and health of their mothers during pregnancy. It was noted that the milk-allergic group had been breast-fed for longer, and therefore cow's milk had been introduced at a later age than in the control group. Interestingly, an

increased incidence of *persistent* nausea during pregnancy was found in the mothers of the allergic children, although the *incidence* of vomiting was the same in both groups. Aversions to various foods, particularly dairy produce, were found to be more prevalent among the mothers of the allergic infants.

These findings obviously point to the need for a prospective study on large series of mothers and infants to investigate further the incidence and persistence of nausea and vomiting, the pattern of dietary aversions and cravings in pregnant women, and the frequency of the development of food allergies in their infants. To be able to account satisfactorily for even a fraction of cases of nausea and vomiting in pregnancy would be a valuable advance.

It seems incredible that a condition which has been noted for millennia, and which affects a quarter or more of the world's population, has evoked so little constructive study. Information has been so scarce that as recently as 1980 it was stated that 'although nausea and vomiting associated with early pregnancy are extremely common, the causal factors remain obscure'.²

J. M. Baylis

A. R. P. Walker

1. Fairweather DVI. Nausea and vomiting in pregnancy. *Am J Obstet Gynecol* 1968; **102**: 135-175.
2. Soules MR, Hughes CL, Garcia JA *et al*. Nausea and vomiting in pregnancy: role of human chorionic gonadotrophin and 17-hydroxyprogesterone. *Obstet Gynecol* 1980; **55**: 696-700.
3. Semmens JP. Female sexuality and life situations. *Obstet Gynecol* 1971; **38**: 555-563.
4. Uddeborg N, Nilsson A, Almgren PE. Nausea in pregnancy: psychological and psychosomatic aspects. *J Psychosom Res* 1971; **15**: 269-276.
5. Katon WJ, Ries RK, Bokan JA *et al*. Hyperemesis gravidarum: a biopsychosocial perspective. *Int J Psychiatry Med* 1980-1981; **10**: 151-162.
6. Finch JW. Nausea and vomiting induced by pregnancy or by administration of synthetic estrogens: treatment with antihistaminic compounds. *Am J Obstet Gynecol* 1949; **58**: 591-594.
7. Murgita RA, Wiggzell H. Regulation of immune functions in the fetus and newborn. In: Byron H, Waksman BH, eds. *Progress in Allergy*, vol. 29. New York: S. Karger, 1981: 54-133.
8. Stern CM. Foeto-maternal relationships. In: Hobart MJ, McConnell I, eds. *The Immune System — a Course on the Modular and Cellular Basis of Immunity*. Oxford: Blackwell Scientific Publications, 1976.
9. Midwinter A. Vomiting in pregnancy. *Practitioner* 1971; **206**: 743-750.
10. Louw JX. Aspects of vomiting in the African. *S Afr Med J* 1966; **40**: 957-959.
11. Hook EB. Dietary cravings and aversions during pregnancy. *Am J Clin Nutr* 1978; **31**: 1355-1362.
12. Freier S. Paediatric gastro-intestinal allergy. *Clinical Immunology — Allergy in Paediatric Medicine*, vol. 1 (Paediatric Workshop). Oxford: Blackwell Scientific Publications, 1974: 107.
13. Bahna SL. Control of milk allergy: a challenge for physicians, mothers and industry. *Ann Allergy* 1978; **41**: 1-12.
14. Dannaceus A, Johansson SGO, Foucard T. Clinical and immunological aspects of food allergy in childhood. *Acta Paediatr Scand* 1978; **67**: 497-504.
15. Matsumura T, Kuroume T, Oguri M *et al*. Egg sensitivity and eczematous manifestations in breast-fed newborns with particular reference to intrauterine sensitization. *Ann Allergy* 1975; **35**: 221-229.
16. Baylis JM, Leeds AR, Challacombe DN. Persistent nausea and other variables in pregnancy — a possible association with cow's milk allergy in infants. *Proc Nutr Soc* 1982; **41**: 46A.
17. Baylis JM, Leeds AR, Challacombe DN. Persistent nausea and food aversions in pregnancy — a possible association with cow's milk allergy in infants. *Clin Allergy* 1983 (in press).