

Oestrogen Therapy of Habitual Abortion

Q.—*In the treatment of a case of habitual abortion, with negative physical findings, I have been advised to give stilboestrol, starting at the sixth week with 5 mg. daily for the first fortnight, and thereafter increasing the dose by 5 mg. daily each fortnight up to the thirty-fourth week. The rationale of this treatment is that a high oestrin level is required to establish a high progesterone level. Will you please comment on this theory? Secondly, are there any dangers in giving such high dosages of stilboestrol for so long?*

A.—It has for long been assumed that habitual abortion is, or may be, due to deficiency of progesterone secretion, particularly at the time of the "change-over" of the site of production from the corpus luteum to the placenta. No convincing evidence for this has ever been adduced. Smith and Smith (see *Physiol. Rev.*, 1948, 28, 1, for a review) have elaborated a theory that oxidation products of the reversible reaction oestradiol \rightleftharpoons oestrone stimulate the secretion of oestrogen and progesterone, in the non-pregnant woman through the release of pituitary gonadotrophins, and in the pregnant woman through increased utilization of chorionic gonadotrophin. They have further postulated that stilboestrol behaves like the oxidation products in causing an increase in pregnanediol excretion (interpreted as indicative of increased progesterone production) and a fall in serum gonadotrophin (pointing to its increased utilization). Other workers have not been able to confirm these findings. Thus Sommerville, Marrian, and Clayton (*Lancet*, 1949, 1, 680) found that stilboestrol decreased the excretion of pregnanediol, while Loraine (*British Medical Journal*, 1946, 2, 1496) found that the fall in serum gonadotrophin caused by stilboestrol was merely transient, the level rising again in spite of continued administration of stilboestrol. The theory, therefore, is far from established.

O. W. Smith (*Amer. J. Obstet. Gynec.*, 1948, 56, 821) claimed that the administration of stilboestrol according to the incremental dosage scheme mentioned in the question gave 77% successful results in the treatment of habitual abortion. Similar results have been obtained with progesterone implants (Bishop and Richards, *British Medical Journal*, 1952, 1, 244), vitamin E (see Bacharach, *British Medical Journal*, 1940, 1, 890), and investigation without specific treatment (Bevis, *Lancet*, 1951, 2, 207). It therefore becomes very doubtful whether these various modes of treatment have any direct effect on the outcome of pregnancy in cases of habitual abortion; if in fact they represent an improvement on the outcome without any attention other than routine antenatal care, it becomes highly probable that their action is mainly psychological.

It is very doubtful if stilboestrol given during pregnancy in the manner considered above produces any harmful effects. There is, however, a report by Meissner and Sommers (*J. clin. Endocr.*, 1950, 10, 603) that postpartum endometrial hyperplasia, resulting in prolonged uterine bleeding, has followed the use of stilboestrol and progesterone during pregnancy in diabetics.

Vaginal Discharge in Children

Q.—*How should cases of vaginal discharge in small children (under 5 years) be investigated and treated? What are the commoner causes?*

A.—The scope of this question is so large that it cannot be answered in detail, and reference should be made to Chapters 4 and 5 in *Pediatric Gynecology*, by G. C. Schauffler, 1947, 2nd edition.

Vaginal discharge in infancy is often a true leucorrhoea, consisting of nothing more than desquamated epithelial cells in a serous or muco-serous medium. This is diagnosed by the absence of pus on microscopical examination. It is of no serious significance and requires no treatment other than reassurance of the mother.

On the other hand, the infant's vagina is susceptible to infection, and a purulent discharge is usually the result of

vulvo-vaginitis. The gonococcus is the most important, and possibly the commonest, cause of this, but almost any organism may be responsible—the streptococcus, pneumococcus, *Bact. coli*, various fungi, *Trichomonas vaginalis*, etc. The infection arises by direct or indirect contact with other infected individuals—often another child. Predisposing causes are poor general health and lack of cleanliness. Another not uncommon cause of discharge is a foreign body in the vagina or local interference, such as masturbation.

The essential part of the investigation of any case is the examination, both by direct smear and by culture, of discharge obtained from the vagina by a swab or fine pipette gently inserted through the hymeneal opening. If there is any evidence of local interference, or if the discharge resists the usual methods of treatment, it is necessary to carry out an examination under an anaesthetic to exclude the presence of foreign bodies or other lesions in the upper vagina and cervix. Sometimes, however, such possibilities can be excluded by passing a fine female urethroscope into the vagina.

The treatment of vulvo-vaginitis depends to some extent on the organism present and its sensitivity to chemotherapeutic and antibiotic agents. The appropriate one of these should be administered systemically. In non-specific infections the raising of the vaginal resistance by the oral administration of oestrone, 0.3 mg. twice daily for a month, is often helpful, but it may produce side-effects such as enlargement of the breasts and uterine bleeding. Vaginal therapy, either with oestrogens or antiseptics, should be avoided if possible because of its psychological effects. However, occasionally the daily instillation of 0.5% "mercurochrome," or other antiseptic, through a fine rubber catheter is effective when other measures fail. If the vulva is inflamed and sore the child should be kept at rest, and a protective preparation such as zinc and castor oil cream should be applied to the labia minora. Many other considerations arise. These include the need to prevent the child transferring the infection to its eyes and measures to minimize the risk of transfer of the infection to other children. Finally, the general management of the child and its mother is most important. The latter is naturally anxious, and often over-anxious to the extent of exaggeration of the trouble. The former tends to learn surprisingly quickly to take a morbid interest in her complaint and in her genital organs.

Vitamin B Supplements

Q.—*Where can I find information whether vitamin B supplements are necessary for children?*

A.—On p. 151 of the book "*Any Questions?*" The book can be obtained for 7s. 6d. (postage 6d.) from the Publishing Manager, B.M.A. House, Tavistock Square, W.C.1.

NOTES AND COMMENTS

Correction.—Mr. J. A. CHALMERS (Worcester) writes: I have no experience of the Mulvany operation for stress incontinence, as reported on p. 281, August 2. The procedure which I have used with great satisfaction is the Marshall-Marchetti operation of retropubic suspension of the urethra and bladder neck, which is diametrically opposed in its aims to the Mulvany procedure.

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