FURTHER EXPERIENCES WITH ETHINYL OESTRADIOL IN THE SUPPRESSION OF LACTATION

BY

T. N. A. JEFFCOATE, M.D., F.R.C.Sed., F.R.C.O.G.

AND

BETTY HARGREAVES, M.B., Ch.B., M.R.C.O.G.

(From the Department of Obstetrics and Gynaecology, University of Liverpool)

In a previous communication (Jeffcoate *et al.*, 1948) it was mentioned that some writers had suggested that ethinyl oestradiol when administered orally has a more prolonged action than other oestrogens. To test the validity of this suggestion further clinical trials have been carried out, the suppression of lactation again being the test object. The total dose administered was of the same order as in the previous trials, but it was all given in one or two days instead of being spread over seven days. Single doses were impracticable, since it would have meant that a patient took a very large number of 0.05-mg. tablets at one time. In one scheme the total dose was given during one day and usually within twenty-four hours of delivery; in the second the same total dose was given, half during the first day and half during the fourth day of the puerperium. Thirty-seven patients were treated, and the results are classified as excellent, good, fair, or poor, according to the criteria set out previously.

Scheme I

(a) *Technique*.—Eleven tablets (0.55 mg.) during the first day, administered in three doses at four-hourly intervals. *Results*: Six patients were treated, two with excellent results. Two had fullness of the breasts with pain on the fourth and fifth days, one had free secretion of milk on the fourth and fifth days, and a sixth complained of fullness and pain on the sixth day. A supplementary course of treatment with 0.1 mg. of ethinyl oestradiol was necessary in these four cases. (Two excellent, four poor.)

(b) *Technique*.—Fifteen tablets (0.75 mg.) during one day, administered in three doses at four-hourly intervals. *Results*: Seven patients were treated, one with excellent result. Two experienced fullness of the breasts with slight discomfort—on the second day in one case and on the fourth day in the other. In the latter, treatment did not begin until the second day of the puerperium. Four patients showed a poor response. In two of these, symptoms arose on the sixth and seventh days and necessitated further treatment. The two others started treatment on the second day and had pain and fullness on the following day. (One excellent, two fair, four poor.)

(c) *Technique*.—Twenty tablets (1 mg.) during the first day, administered in four doses at four-hourly intervals. *Results*: Four patients were treated, one with excellent result. A second patient had pain and fullness on the fourth day, a third had similar symptoms on the eighth day, whilst a fourth had a free flow of milk from the sixth to twelfth days. (One excellent, three poor.)

Scheme II

(a) *Technique*.—Six tablets (0.3 mg.) first day, five tablets (0.25 mg.) fourth day—total, 11 tablets (0.55 mg.). *Results*: Six patients were treated, three with excellent results and two with good results. Of the latter, one had slight secretion on the fourth and the other on the fifth day. A sixth had minimal discomfort on the second day only. (Three excellent, two good, one fair.)

(b) *Technique*.—Eight tablets (0.4 mg.) first day, seven tablets (0.35 mg.) fourth day—total, 15 tablets (0.75 mg.). *Results*: Seven patients were treated, two with excellent results. Four cases had moderate fullness of the breasts on the fourth day,

relieved by the second dose, whilst the seventh case had fullness and pain on the fourth day. (Two excellent, four fair, one poor.)

(c) *Technique*.—Ten tablets (0.5 mg.) first day, ten tablets (0.5 mg.) fourth day—total, 20 tablets (1 mg.). *Results*: Seven patients were treated, with excellent results in three cases and with a good result in another two. The remaining two cases had pain and fullness of the breasts—one on the fourth and the other on the sixth day. Both required further treatment. (Three excellent, two good, two poor.)

Conclusions

The results of these trials may be summarized by saying that ethinyl oestradiol in relatively large doses given over a short period or at long intervals is unreliable in suppressing lactation, whereas in divided doses spaced over several days it was previously shown to give excellent or good results in a high percentage of cases. With a total dose of 0.55 to 0.75 mg. given during the first seven days of the puerperium an excellent or good response was noted in 24 out of 27 cases in the previous trials. In this series, 0.55 mg. to 1 mg. administered during a period of 12 hours produced only four good or excellent results in 17 cases. When it was divided and given half on the first day and half on the fourth day of the puerperium the effect was satisfactory in 12 out of 20 cases.

The results reported here compare so unfavourably with the earlier ones that it seems permissible to conclude that they offer little evidence to support the idea that ethinyl oestradiol is absorbed or utilized comparatively slowly and that its effect is prolonged. If it has these properties, then they are not so strongly developed as to make the administration of single massive doses, or large doses at infrequent intervals, an efficient method. As in the case of other oestrogens, smaller doses given regularly during several days are the most effective.

REFERENCE

Jeffcoate, T. N. A., Hargreaves, Betty, Lister, Ursula M., and Roberts, H. (1948). *British Medical Journal*, 2, 809.

METATARSUS QUINTUS VALGUS

BY

HORACE DAVIES, Ch.M., M.Ch.Orth., F.R.C.S.

Orthopaedic Surgeon, St. Catherine's Hospital, Birkenhead,
and Whiston Hospital, Lanes

Much individuality appears to exist in the shape of the fifth metatarso-phalangeal junction. Rarely do we see a foot with its outer border prolonged straight forward along the little toe. The head of the metatarsal interrupts this line by protruding outwards, and the axis of the little toe is usually directed inwards. Most feet therefore exhibit a bunionette, or, as it has been called, a tailor's bunion, to a greater or less degree. Rarely, however, does it give rise to symptoms. A bunionette is not uncommonly seen in combination with pes and hallux valgus and general splaying of the forefoot, and is therefore regarded as a secondary deformity in these cases. Chronic irritation due to pressure upon the lateral surface of the foot in the cross-legged or sartorial position is also to be considered as a causative factor, for it was this that gave rise to the name "tailor's bunion." The case of bilateral bunionette described below appeared as a primary and independent deformity, and the suggestion is made that such a condition can occur as a distinct clinical syndrome.

A girl aged 9 came to the clinic complaining of painful swellings at the bases of the little toes. They had been