INHIBITION OF LACTATION IN A MILITARY HOSPITAL MATERNITY UNIT

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SUMMARY: Sixty-six postpartum patients were treated with either a single 4 mg quineestrol tablet or identical placebo given within six hours of delivery.

On the basis of five-day in-patient observation, 30 patients (85 per cent) of the quineestrol treated group were completely comfortable throughout their stay. This compared with only 8 patients (25.8 per cent) in the group receiving placebo.

From this small study it would seem that quineestrol is markedly superior to placebo in inhibiting lactation as judged on a five-day in-patient stay. Quineestrol would appear to offer significant advantages in therapy and in ease of administration for those patients in Service Hospitals whose condition warrants use of oestrogens.

Introduction

Quineestrol (Estrovis) which is the 3-cyclopentyl ether of ethinyl oestradiol, has been the subject of extensive clinical evaluation since it was first introduced for the inhibition and suppression of lactation in 1967. It has been compared with the conventional oestrogens, ethinyl oestradiol and stilboestrol (Kuku 1968, Watson 1969, Brett, Douglas and Walker 1971, Plater 1971), with the only other fat stored oestrogen on the market, chlorotrianisene (King 1972), with no oestrogen therapy (McGlone 1969, Hodge and Maiti 1971, Cruttenden 1971) and fluid loading (Roberts 1970).

In the trials mentioned where quineestrol was compared with placebo forms of therapy it was found to be significantly superior to inert preparations in inhibiting lactation. These findings contrast with the views of MacDonald and O'Driscoll who suggest that exhibition of oestrogens is unnecessary in the inhibition or suppression of lactation (MacDonald and O'Driscoll 1965).

If a decision is made to use an oestrogen to inhibit or suppress lactation it would seem reasonable to keep the dosage as low as possible (Miller 1969). Quineestrol (as a 4 mg single tablet for inhibition of lactation and 1 or 2 tablets for suppression of established lactation) would appear to be a simple and effective oestrogen which would meet this requirement.

As quineestrol had not previously been evaluated in a Service Establishment, it was decided to carry out a comparison of quineestrol with placebo under double blind conditions in the Maternity Unit of the Military Hospital at Tidworth.

Method

Eighty patients who had elected not to breast feed were given either a single 4 mg quineestrol tablet or identical placebo under double blind conditions within six hours of delivery. Of the original 80 patients, 66 remained as in-patients for a minimum period of

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five-days following delivery. The remaining 14 patients were observed for periods less than five days and were eliminated from the study. During the five-day in-patient stay daily records were kept of the condition of the breast with regard to consistency and lactation. The nature of the lochia, rate of involution and any side effects were also noted. In addition to this objective assessment by the clinician, the mother was questioned about breast comfort each day.

In order to determine the patient's progress following discharge from hospital, a follow-up questionnaire was devised. Unfortunately, this phase of the trial coincided with a six-week suspension of postal services due to an industrial dispute, and it was decided to evaluate the trial results on the basis of the five-day in-patient stay.

Results

On completion of the trial it was found that 35 patients had been treated with quineestrol, whilst 31 patients had received the placebo tablet. The results of observer assessment are shown in Table I with percentage results in brackets. Results of mothers assessment are shown in Table II.

Table I
Observers assessment

	Quineestrol		Placebo	
	Number	Percentage	Number	Percentage
Total patients	35		31	
Excellent	21	60	NIL	NIL
Fair	9	25.7	9	29
Bad	5	14.2	22	70.9

Legend: Excellent—Soft consistency. No lactation throughout. Fair—Mild engorgement and/or colostrum or more than one day. Bad—Severe engorgement and/or milk for one or more days.

Table II
Mothers assessment

	Quineestrol		Placebo	
	Number	Percentage	Number	Percentage
Completely comfortable throughout	30	85.7	8	25.8
Mild discomfort for more than one day	4	11.4	9	29
Painful for one or more days	1	2.8	14	45.1

Side effects were very similar on the two trial preparations. In the group treated with quineestrol, headache was reported in three patients, nausea in two, diarrhoea in two and ankle oedema in one subject. In the patients receiving the placebo, headache was reported in three patients and nausea in two. The character of the lochia and rate of involution were within normal limits in all patients.

Discussion

In this limited trial quineestrol has thus been shown to be markedly superior to placebo in the inhibition of lactation as judged on five-day in-patient stay. It is unfortunate that circumstances prevented compilation of data on possible lactation symptoms in the puerperium, but previous clinical trials have shown quineestrol to be highly effective in preventing 'rebound lactation'.

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Senior Appointment

Brigadier K. G. Galloway, O.B.E., Q.H.D.S., Deputy Director of Dental Service, British Army of the Rhine, to be Director of Army Dental Service, in the rank of Major-General, in May 1974, in succession to Major-General J. H. Robertson, Q.H.D.S., F.D.S., R.C.S.

Brigadier Kenneth Galloway, aged 56 years, was educated at Oban High School and the University of St. Andrews, he was commissioned into the Royal Army Dental Corps in 1940, and has served in the Middle East, Cyprus, Malta and B.A.O.R.

He became Deputy Director of Dental Service, B.A.O.R. in May 1972.

Brigadier Galloway is married with two daughters. He was appointed Honorary Dental Surgeon to The Queen in 1971.

Appointment to The Queen

Brigadier A. P. Dignan, M.B.E., M.B., Ch.B., F.R.C.S.I., late R.A.M.C., was appointed Honorary Surgeon to The Queen, with effect from 1st January 1974, in succession to Major-General R. J. Gray, C.B., M.B., F.F.C.M., late R.A.M.C., who has retired.