ABLATON: Single Intramuscular Injection to suppress lactation

by

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Numerous good reasons have been advanced for the choice of breast feeding. The fact is, breast feeding is losing the battle. The main reason for this is that more and more mothers are going back to work and therefore find breast feeding a bother. Secondly, manufacturers are producing Infant milk which prove satisfactory in replacing breast milk.

The increasing popularity of bottle-feeding in the last two decades has led to the search for an effective means of lactation suppression. Methods reported include varying doses of stilboestrol, analgesics, injection of hexoestrol, plentiful of water to drink and various superstitions, practices here in Malaysia.

The modern trend in obstetrics is to discharge the post-partum mother from institutions early. Large doses of stilboestrol to be taken at home without supervision is unsatisfactory. However, stilboestrol is still the commonest oestrogen used in the suppression of lactation. This has to be given in large doses and over a long period to be really effective. Hodge & Carlise (1969) found that stilboestrol 15mgm four times daily for four days was only effective in 85 per cent of patients. Furthermore, rebound breast filling was a prominent problem. Stirrat et al (1968) also found that stilboestrol was effective but after the first five days engorgement was a problem.

On the other hand, there are also very favourable reports. Holand et al (1955) reported good results "with almost any oestrogen as long as therapy is started early and continued for long enough." Arbabanel and Goodfriend (1940) also reported good results (95 per cent) by giving stilboestrol for 24 days.

Kuku (1968) gave single oral dose of Quinestrol (Estrovis) to a group of patients and found that only 67 per cent had lactation successfully suppressed. He gave ethinyl oestradiol for five days and had 63 per cent success.

Loke and Lean (1970) gave a single injection of Ablaton and found it to be effective in 100 per cent of patients.

Material & Method

This is a study of 251 patients delivered in the Clinic for Women, Petaling Jaya in the years 1971, 1972, 1973. The patients are asked on admission whether they wished to have an injection to suppress lactation of milk. All those who wished to have injection are included in the trial. They are divided into two groups:-

Group A: Injection given immediately before delivery.

Group B: Injection given immediately after delivery.

The reason for this grouping is to see if Ablaton will work before teh seperation of the placenta. The Manufacturer advises: "One citole of Ablaton is injected intramuscularly, if possible before the exclusion of the placenta."

Ablaton is an oily solution containing the following short and long acting hormone esters:-

Osetrogen: Oestradiol bensoate 5mg.
Oestradiol valerate 8mg.

Progestogen: Norethisterone acetate 20mg.

Androgen: Testosterone cenanthate 180mg.

The short-acting hormones produces a rapid onset of suppression of lactation and long-acting.

hormones ensure the continuation of this action. This will avoid the rebound filling and irregular bleeding per vaginam. Both these side-effects are common with oestrogen therapy.

Ablaton comes in a prepacked disposable citole ready for injection. Each patient in the two groups received one citole of injection in the gluteal muscle.

Results

The results are assessed according to the scheme used by Loke & Lean (1970):-

I. Complete suppression.
II. Incomplete suppression.
with i) milk secretion.
ii) milk secretion & breast engorgement/tenderness.
iii) breast abscess.

Possible side effects eg. headache, giddiness, nause, vomiting, hirsutism and voice changes are recorded.

Patients are discharged from the maternity home on the third postnatal day if suppression is complete. Others stay another two days before going home. Thereafter patients are seen at the end of six weeks and again at the end of eight months. At these visits, signs of virulisation and menstrual disturbances are looked for.

All the patients attended the six weeks visit and 75 per cent of patients attended the eight months visit.

Tables 1 & 2 shows that in group A, 84 patients (65-6 per cent) and in group B, 99 patients (81-3 per cent) had complete suppression of lactation following injection of ablaton.

Group A also had 44 patients with incomplete suppression - 11 patients had painless secretion of milk while 33 patients had engorgement and/or tenderness. The same figures for Group B are 18 patients and 6 patients. The engorgement and tenderness are usually mild. No case of breast abscess was recorded.

No side effect was recorded.

Table 1. Group A: Ablaton before Delivery

	Day	1	2	3	4	5	TOTAL
I.	Complete Suppression	84	–	–	–	–	84
II.	Incomplete Suppression Milk Secretion	–	–	8	3	–	11
	Milk & Engorgement tenderness	–	–	10	19	4	33
	Breast Abscess	–	–	–	–	–	0
						TOTAL	128

Table 2. Group B: Ablaton gives After Delivery

	Day	1	2	3	4	5	TOTAL
I.	Complete Suppression	99	–	–	–	–	99
II.	Incomplete Suppression Milk Secretion	–	–	7	10	1	18
	Milk & Engorgement tenderness	–	–	–	6	–	6
	Breast Abscess	–	–	–	–	–	0
						TOTAL	123

Follow-up before 6 weeks

Although patients are discharged satisfactory (the patients who showed signs of engorgement and/or tenderness stayed till the 7th day) some patients came back before the post-natal appointment at 6 weeks.

Group A	8 patients..
Group B	2 patients.

Those patients in group A came because of rebound filling. The two patients in group B are those who had engorgement and/tenderness prior to discharge.

Follow-up at 6 weeks

Apart from the 10 patients mentioned above, another 6 had mild congestion after discharge from the nursing home. All were not sufficiently uncomfortable for the patients to seek treatment. Three of these were in Group A and three in Group B.

None of the patients complained of menstrual problems however, only 149 patients have had one period each.

There was no sign or sympton of virilisation. All patients in the trial attended this follow-up clinic.

Follow-up at 8 months

A total of 188 patients (74.9 per cent) attended this clinic. No sign or sympton of virilisation was noted. No abnormality was noted in the breast.

As most of these patients have started on oral contraceptives it would not be fair to comment on their menstrual patterns.

Discussion

Lean and Loke (1970) reported that Ablaton given to 20 patients for primary suppression was effective in 100 per cent of the patients, if given within 5 hours of birth of the infant. The present study shows that Ablaton given immediately following the delivery of the infant was effective in suppressing lactation in 81.3 per cent of the patients. The manufacturer also claims that in a trial all but one patient had satisfactory primary suppression.

The study indicates that Ablaton is superior to oestrogens to the suppression of lactation viz Hodge and Carlisle (1969) who reported 68 per cent success. Furthermore, there are some objections to the use of oestrogens. The side effects of stilboestrol e.g. abnormal bleeding from the genital tract outweighed the benefits (Winter & Robinson 1964). Daniel et al (1967) believe that stilboestrol predispose to thromboembolism in the puerperium, although this may not be such a serious objection in Malaysia and Singapore. Finally, MacDonald and O'Driscoll (1966) stated that the use of stilboestrol is not justified since a placebo is almost as effective.

Single injection of Ablaton in also superior to Quinestrol in suppressing lactation. Kuku (1968) reported 67 per cent success using a single oral dose of Quinestrol (Estrovis).

The efficacy of Ablaton is less when given immediately prior to the delivery of the presenting part. The reason for this is obscure since the time difference between this and an injection given immediately after the delivery of the infant is not long.

Although rebound filling is noted in 8 patients it is not a big problem. No other side effect was noted.

Since androgen is one of the components of Ablaton virilisation is a concern. However, in the follow-up to 8 months in some of the patients, no virilisation is noted.

Summary

ABLATON is given to 250 patients in a clinical trial to assess its efficacy for the primary suppressing of lactation. In the group whose injections were given immediately after the delivery of the infant a 81.3 per cent success was recorded. When the injection is given before the delivery there is only 65.6 per cent.

No major side-effect was noted.

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