PYRIDOXINE AS ANTILACTATING AGENT

(Preliminary Study of 75 Cases)

by

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Suppression of lactation has seen physician's dilemma since ages. Many drugs have been tried but the ideal drug remains yet to be discovered. Oestrogens have provided obstetricians with a cheap and easy method of suppressing lactation. Although effective, they cause unplesant side effets such as nausea, vomiting, headache, puffiness of face, rebound filling of breasts etc. In addition there is increased likelihood of puerperal thromboembolism. This has led to the continued search of other drugs which can be both effective and free from serious side effects. The present study is a preliminary report of use of pyridoxine as antilactating agent in the postpartum period.

Material and Methods

A double blind study was undertaken to compare the efficacy of pyridoxine with that of traditionally employed stilbesterol.

A total of 150 women from the age group of 20 to 40 years and parity group of 1 to 5, in whom lactation had to be suppressed were selected for trial.

In 75 women pyridoxine was used in the dosage of 200 mg. tablets three times a day for 6 days. For comparison in 75 patients stilbesterol in the doses of 5 mg. tablet thrice daily for 6 days was given for suppression of lactation.

Daily assessment was made and observations on consistency of the breasts, amount and type of secretion, if any, were recorded in both the groups. Side effects like nausea, vomiting, puffiness of face, bleeding, delay in the return of menstruation etc. were also recorded.

Results

Table I shows lactation inhibition achieved by both pyridoxine and stilbesterol. With pyridoxine 70 (93.3%) cases achieved inhibition of lactation in the first week. Whereas stillbesterol could suppress lactation only in 55 (73.3%) of the cases within first week.

The speed with which symptoms such as painful engorgement of breast, congestion, tenderness etc. were relieved is shown in Table II. The symptoms were relieved within 12-18 hours in patients given pyridoxine, while stilbesterol took over 24 hours to relieve the symptoms. Patients given stilbesterol experienced rebound filling of breasts in 28% of the

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TABLE I

Effect on Lactation With Pyridoxine and Stilbesterol

Drug	No. of cases	Cessation of Lactation		
		1 week	2nd week	3rd week
Pyridoxine	75	75 (93.3%)	5 (6.7%)	—
Stilbesterol	75	55 (73.3%)	18 (24%)	2 (2.7%)

TABLE II

Relief of Symptoms by Different Drugs

Drug	No. of cases	Relief in hours	Rebound filling of breasts
Pyridoxine	75	12-18 hrs.	Nil
Stilbesterol	75	over 24 hrs.	21 (28%)

cases, whereas with pyridoxine rebound filling was not noted in any case.

Of the 75 cases treated with pyridoxine, 5 (6.7%) required a repeated course of treatment. Lactation ceased completely within 2 weeks in all the patients. There had been no untoward effect such as delay in the return of menstruation or excessive vaginal bleeding in any case. As against this 8 (10.6%) cases who were treated with stilbesterol had excessive vaginal bleeding and 7 (9.3%) had delayed return of menstruation.

Discussion

Oral administration of pyridoxine was associated with a rapid and trouble free suppression of lactation in 93.3% of the cases within a week. Foulkas (1973) had used pyridoxine as antilactating agent and found it to be effective in 100% of the cases within first week. Sinha (1975) reported 97% efficacy of pyridoxine as an antilactating agent.

The exact mechanism by which pyridoxine inhibits lactation is not clearly known. In the form of pyridoxal phosphate which serves as a co-enzyme of DOPA decarboxylase, it promotes conversion of DOPA to dopamine. The increase in the dopamine content of the hypothalamus in turn inhibits the prolactin secretion. (Fuxe and Ungerstedt, 1966).

The results of this preliminary study of pyridoxine as antilactating agent were very encouraging, and warrants further trials in more patients not only as postpartum lactation inhibitor, but also in other endocrine disorders requiring prolactin inhibition.

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