THIETHYLPERAZINE IN PREGNANCY VOMITING

by

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Introduction

Pregnancy vomiting though might have existed from the times of Eve, the riddle of its cause, like the cause of toxaemia of pregnancy, has still eluded us and has remained a great enigma of obstetrics. The very fact that newer antiemetic drugs claiming better results for pregnancy vomiting are flooding our markets is a proof that pregnancy vomiting is increasing and more patients demand relief from it. It is true that patients seek treatment much earlier and so severe forms of hyperemesis are not seen frequently these days. The causes that have been held responsible for pregnancy vomiting are metabolic, endocrine, neurogenic or psychogenic disturbances singly or in combination. The multiplicity of aetiological factors accounts for numerous drugs available for pregnancy vomiting. The self-limiting nature of the disease and proponents of each drug claiming good results, makes evaluation of the drug more difficult.

The present study was undertaken to evaluate the effect of Thiethylperazine in pregnancy vomiting. Thiethylperazine is a phenothiazine derivative with a chemical formula 3-ethylmercapto - 10 - (l'methyl-piperazinyl-4'-propyl)-phenothiazine. It is experimentally proved to act on vomiting centre as well as chemoreceptor trigger zone (CTZ). The CTZ is situated on the floor of the fourth ventricle which relays impulses to vomiting centre. Goodman and Gillman and Boyd et al., have suggested that CTZ may be the specific site of action of antiemetic agents.

Material and Methods

The effect of Thiethylperazine on 30 cases of pregnancy vomiting is evaluated. Other organic causes of vomiting in pregnancy were excluded by thorough history taking and clinical examination. Patients with vomiting, sufficient enough to seek medical aid, were selected for study. The duration of pregnancy varied from 6 to 16 weeks. No attempt was made to judge the element of neurosis because of the obvious difficulties in diagnosis. No controls were kept in this study.

It is seen from table I and table II that most of our patients are young and primigravidae. In Priver's series 57% were multiparas and the

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TABLE I

Age in years	No. of cases
20-25	19
26-30	10
30 & above	1

TABLE II

Parity	Primi	Multi
Cases ..	18	12
Per cent ..	60	40

average age was 27.4 years. Twenty-three patients were treated as outdoor patients and 7 patients were admitted because of dehydration and also with a view to change the environment. The course consisted of 1 tablet (6.5 mgms.) three times a day for 5 days. The course was repeated if the response was not very good with the first course or if the vomiting recommenced after stopping the drug. The hospitalized patients were treated with injection of the same strength that is 6.5 mgms. given intramuscularly three times a day. The patients were switched on to oral therapy as soon as they retained the feeds. The patients were advised dietetic adjustment and plenty of glucose. No other drugs were advised.

The relief usually started after 24 hours. The frequency of vomits diminished and in some cases stopped completely. The occurance of vomits soon after taking the tablet delayed the relief from vomits. The nausea and vomiting recommenced in 24 patients after the drug was withdrawn. Fourteen patients required a second course and ten patients required the third course of the drug. After the drug the vomits which used to occur any time of the day, were restricted to morning period only in 8 cases and so administration of two tablets at night only, controlled the vomits.

The response was good in 70% cases, fair in 10% and poor in 20% cases. Good response was obtained in 83.4% in Priver's series.

TABLE III
Response

	No. of cases	Percentage
A. Complete stoppage of nausea and vomiting ..	21	70%
B. Slight nausea continued in the morning or occasional vomit of watery material ..	3	10%
C. Poor response ..	6	20%

TABLE IV
Side Effects

Drowsiness	8 cases
Choking sensation in the throat	4 cases

Drowsiness was more often seen in patients who received two or three courses of the drug. It was transitory. It was not noticed in those patients who took the tablets only at night. Choking sensation in the throat was complained of by 4 patients. They felt as if something was stuck up in the throat which neither went down in the stomach nor came out through the mouth.

Congenital Malformations

Only 18 patients have delivered so far and the babies have no detectable congenital malformations. Other 12 patients who received the drug are yet to deliver. The series is too

small to draw any conclusions about the development of congenital malformations.

Discussion

It would be Quixotic to expect a cure of pregnancy vomiting without knowing its cause. At best one could expect suppression of the symptoms till spontaneous cure occurs. We do not claim that this drug eliminates the cause of pregnancy vomiting but there is reasonable evidence to suggest that it does suppress effectively the vomiting till nature brings about a cure. By the time the patient is 12 weeks pregnant, the vomiting is known to stop irrespective of the treatment or otherwise. Till such time as a definite cause is established for pregnancy vomiting so that a specific drug could be given, one shall have to be satisfied with symptomatic relief.

The recent reports of the development of congenital malformations in the babies when the mothers were treated with antiemetic or tranquiliser drugs in the first trimester of pregnancy, is a red signal to all those who prescribe these drugs indiscriminately. *Prescribe only when you must* is a good dictum which all obstetricians should remember while treating patients in the first trimester. We do not recommend the use of antiemetic drugs for all cases of pregnancy vomiting. Enough trial must be given to dietetic adjustment, glucose, laxatives and suggestion therapy. It is only when these methods fail that antiemetic drugs should be administered and that too only as long as necessary.

To conclude, Thiethylperazine has a good antiemetic action which controls vomiting in 24-48 hours in many patients and except for drowsiness and choking sensation in the throat in a few cases no undesirable effects are noticed. The babies delivered so far have no detectable congenital malformations.

Summary and Conclusions

1. Effect of Thiethylperazine on 30 cases of pregnancy vomiting is studied.
2. Primigravidae accounted for 60% of the patients.
3. Good response was obtained in 70% of the cases.
4. Drowsiness and choking sensation in the throat was noticed in a few patients.

Acknowledgement

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Thiethylperazine is marketed in India by Sandoz as *"Torecan"*.

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