A CRITICAL STUDY OF 'SURMONTIL' (TRIMIPRAMINE) IN GYNAECOLOGICAL DEPRESSIVE AND PSYCHOSOMATIC DISTURBANCES

by

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A pre-requisite to effective treatment of any disease is proper diagnosis and remedial measures, unfortunately, there are occasions when a proper diagnosis cannot be made in spite of available knowledge and scrupulous search. Pain sensation is one such disorder for which many a time the root cause remains obscure. Some people take the extreme view that deranged mind is responsible for the causation of pain, emotional disturbances, anxiety, depression, irritability and insomnia. True, that many diseases, medical or gynaecological are associated with some form of emotional upset. A gynaecologist has to face many such disorders with or without primary gynaecological conditions. In recent years it has also been realised that many sexual problems, menstrual disorders, fertility disturbances and menopausal symptoms could be traced to some mild psychiatric disturbances not serious enough to merit the patient to be referred to a psychiatrist or for intensive psychiatric therapy such as E.C.T. A psychotrophic drug reliable in its effectiveness and free from side effects would be extremely welcome under these circumstances. Trimipramine ('Surmontil') is a relatively recent addition to the existing antidepressant drugs. Chemically it is a brand of trimipramine which is 5-(3-dimethylamine-2. methyl propyl)-10, 11, dihydro-5H-dibenz (b & f) azeine. This is an interesting compound because it is a racemic mixture of two optically active dextro and laevorotatory isomers. The dextrorotatory form is predominantly antidepressant, while the laevorotatory form is mainly sedative in action. It is this sedative action which makes it superior to Imipramine (Tofranil) because it has been found to produce sleep and to alleviate the associated anxiety state besides relieving the depression. (Lambert and Guyotat, 1961; Lambert *et al*, 1961; Salzmann, 1965). A controlled study of Surmontil and placebo has shown that trimipramine has better therapeutic value than placebo for the treatment of endogenous depression (Nandi and Azmani, 1972). Lean and Sidhu (1972) made a comparative study of Imipramine (Tofranil) and Trimipramine (Surmontil) in 40 cases of depression associated with gynaecological condition and confirmed the superiority of Surmontil. In view of the encouraging results with the use of Surmontil and paucity of published work on this drug, the present study has been undertaken.

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Material

A total of 107 patients attending the hospital and private clinics were included in this study. The age group varied from 15 to 41 and above and the parity ranged from 0 to 6 and above. At the outset a research schedule specially designed for the study was filled in. Relevant information about occupation, religion, educational status, total family members, family income, any family history of nervous breakdown, past medical and surgical history was gathered. The indication for treatment, a primary gynaecological, a primary psychiatric and associated psychiatric condition was then considered. Any patient complaining of depression associated with anxiety, sleep disorders, agitation, lethargy or psychosomatic symptoms like headache, palpitation, increased sweating, fear and apprehension were included in the trial. The primary gynaecological conditions were menopause, dysmenorrhoea, abdominal pain, pelvic pain, backache and postoperative cases. Only mild cases of associated depression were treated and serious cases were referred to the psychiatrist. All patients except the postoperative ones were treated as out patients. Cases of glaucoma, thyrotoxocosis, urinary infection, hepatic disease, epilepsy and pregnancy were not included in the trial. The indication for treatment has been summarised in Table I.

TABLE I

Indication for Treatment With Surmontil

Abdominal pain and backache	: 30
Menopause	: 25
Dysmenorrhea	: 20
Postoperative	: 10
Depression, irritability and insomnia	: 22
Total	: 107

Dosage Scheme

Surmontil tablet, 10 mg and 25 mg has been used. Majority of the patients had a ten day short term therapy and the patients with mild depression anxiety, irritability, headache, insomnia and menopausal symptoms had 4 week therapy with gradual withdrawal of the drug. The severity of the condition, the constitution of the patient and the response to treatment were the clinical guiding factors for choosing the dosage. Initially and for mild cases a 10 mg tablet daily at bedtime for 10 days was prescribed. For poor response the dosage was increased in some patients. The postoperative cases received 25 mg tablet twice or thrice depending on the nature of pain, depression, fear, anxiety and apprehension. The patients with dysmenorrhoea were instructed to begin a 10 mg tablet twice about 5 days before the onset of menstruation and to continue it until a 10 day course was completed.

Result

Table I indicates the varied conditions for which the drug was used. For all cases of abdominal pain and backache a thorough search was made to exclude organic cause before putting them on to Surmontil therapy.

The patients were seen at the end of 10 day course or at weekly interval when a longer course of treatment was prescribed.

Assessment

The response to treatment was ascertained on questioning the patients during the follow-up and the result was plotted as, (1) improved on treatment, (ii) improved a little on treatment, (iii) no change, (iv) became worse. (Table II).

TABLE II
Result of Treatment With Surmontil

Indication	(No. of patients)	Improved	Improved a little	No change	Worse
Menopause	25	19	4	2	0
Postoperative	10	6	0	4	0
Abdominal pain and backache	30	16	10	4	0
Dysmenorrhoea	20	14	4	2	0
Depression, irritability, anxiety and insomnia	22	15	7	0	0
Total	107	70	25	12	0

Thus, it would appear that approximately 65 per cent of the patients had remarkable improvement, 25 per cent had little improvement and about 10 per cent had no change under the drug regime. There was no patient in this series who got worse. The success rate was considerably high in the group of patients with menopause and those suffering from depression, irritability, anxiety and insomnia.

Drop Outs

Any patients failing to attend for assessment at the end of 10 day regime or at the end of the first week in 4 week regime group was considered a 'drop out' and in this series there were 15 drop outs. These drop outs have not been included in the final analysis.

Side Effects

The side effects were very few. The commonest side effects were day time drowsiness in some patients, particularly when 25 mg tablets were given twice a day for 4 weeks. Some patients also complained of dry mouth.

Discussion

The trial of Surmontil in selected cases suggests its usefulness in many gynaecological conditions associated with depression and psychosomatic disturbances. Needless to mention that a thorough search should be made to exclude any organic cause before putting a patient on Surmontil (Trimipramine). The use of the drug in menopause, abdominal pain and backache, dysmenorrhoea and mild depression, anxiety, irritability and insomnia was quite satisfactory in this series. Many gynaecological diseases have an associated or superimposed psychosomatic factor and proper evaluation of such factors are prerequisite to Trimipramine therapy. Quite a number of patients at menopause would be prone to have psychosomatic troubles and a large number of them are supposed to be benefitted by Surmontil. The superiority of Surmontil over Tofranil (Imipramine) in regard to its sedative action and less side reactions has been established by a number of observers (Lambert and Gyotat, 1961; Lambert *et al*, 1961; Salzmann, 1965; Burke *et al*, 1967; Burns, 1963). Lean and Sidhu, (1972) have further substantiated the value of Surmontil in depression associated with gynaecological conditions in Singapore. In cases of unexplained pain, vague symptoms, headache, palpitation and mild emotional disturbances, a ten day course of Trimipramine is worth trying. Finally, apart from drug potency, a

variable response of the drug due to genetic factors has been stressed by Pare *et al*, 1962.

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References

1. Burns, B. H.: Brit. J. of Psychiatry, 3: 1155, 1965.
2. Burke, B. V. et al.: Med. J. of Australia, 1: 1216, 1967.
3. Lambert, P. A. and Gyotat, J.: Presse, Med., 69: 31, 1425, 1961.
4. Lambert, et al.: Ann. med-Psychol., 2: 713, 1961.
5. Lambert, et al.: L'Encephale. 52: 244, 1963.
6. Lean, T. H. and Sidhu, M. S.: Proceedings of Obstetrics & Gynaecological Society, Singapore, 3: 222, 1972.
7. Nandi, D. N. and Ajmani, S.: Indian J. Psychiat., 14: 22, 1972.
8. Pare, C. M. G. et al.: Lancet, 2: 1340, 1962.
9. Salzmann, M. M.: Brit. J. Psychiatry., 111: 1105, 1965.