TREATMENT OF SCHIZOPHRENIC REACTIONS WITH PHENOTHIAZINE DERIVATIVES

A Comparative Study of Chlorpromazine, Trifluprómazine, Mepazine, Prochlorperazine, Perphenazine, and Phenobarbital [1]

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Since chlorpromazine[5] has been proved useful in treating chronic hospitalized schizophrenics(1, 2, 3, 4), newer phenothiazine derivatives have appeared with claims of higher potency, greater therapeutic effectiveness, and fewer side effects or complications. After reviewing the voluminous literature, the harried clinician might still wonder whether any of the newer compounds were superior in any way. The reports on mepazine, for example, have ranged from enthusiastic endorsement to unqualified rejection(5, 6, 7, 8, 9) : Bowes concluded that mepazine was twice as strong as, interchangeable and synergistic with chlorpromazine ; Denber's sober title, "Ineffectiveness of mepazine . . ." completed the spectrum of opinion.

Recently more definitive studies of the newer phenothiazine derivatives have appeared(10, 11). Although these studies still contain contradictions, the differences are more understandable. In Freyhan's study of 10 phenothiazine compounds and reserpine, chlorpromazine was more effective than mepazine, reserpine, and promazine. It is inferred from his data that perphenazine, prochlorperazine, trifluoperazine and trifluprómazine were not more effective than chlorpromazine, although he makes it clear that they caused more extrapyramidal reactions. Goldman differed with Freyhan, stating that perphenazine, proclorperazine, and trifluprómazine were more effective than chlorpromazine, caused fewer side effects and practically no complications. He could not differentiate therapeutically between perphenazine and prochlorperazine but found that trifluprómazine produced fewer side effects than either. Some of these contradictions appear to be due to the use of different dosage schedules, criteria of improvement, treatment goals, and population samples.

With this and its own experience as a background(12, 13), the Veterans Administration began, in May 1958, a large-scale cooperative study of the relative therapeutic

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[1] Project 3 of the Veterans Administration Cooperative Studies of Chemotherapy in Psychiatry. Preliminary results were presented at the Fourth Annual Research Conference on Chemotherapy in Psychiatry, VA Hospital, Memphis, Tenn., May 20, 1959. The indicated authorship connotes roles in planning or coordinating the study and preparing this report. Others who made major contributions were : T. G. Andrews, Ph.D., J. L. Bennett, M.D., E. M. Caffey, Jr., M.D., H. M. Houtchens, Ph.D., C. J. Lindley, M.A., M. Lorr, Ph.D., A. S. Marrazzi, M.D., A. Pokorney, M.D., and M. Rosenblum, M.D. The 35 VA hospitals which participated in this study are located at : Albany, N. Y., American Lake, Wash., Ann Arbor, Mich., Augusta, Ga., Battle Creek, Mich., Bay Pines, Fla., Biloxi, Miss., Brockton, Mass., Bronx, N. Y., Buffalo, N. Y., Coatesville, Pa., Danville, Ill., Denver, Colo., Downey, Ill., Fort Meade, S. Dak., Houston, Tex., Jefferson Barracks, Mo., Los Angeles, Calif., Lyons, N. J., Montrose, N. Y., Murfreesboro, Tenn., New York, N. Y., Northampton, Mass., North Little Rock, Ark., Northport, N. Y., Palo Alto, Calif., Perry Point, Md., Roseburg, Ore., Salt Lake City, Utah, Sepulveda, Calif., Togus, Me., Tomah, Wis., Topeka, Kan., Tuskegee, Ala., and Waco, Tex. Without the generous cooperation of staff personnel from these hospitals, this study would not have been possible.

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[5] The generic and trade names of the drugs used in this study are : chlorpromazine—Thorazine (donated by Smith, Kline and French Laboratories), mepazine—Pacatal (Warner-Chilcott Laboratories), perphenazine—Trilafon (Schering Corporation), prochlorperazine—Compazine (Smith Kline and French), trifluprómazine—Vesprin (E. R. Squibb and Sons).