# THE USE OF RITALIN IN PSYCHOTHERAPY OF DEPRESSIONS OF THE AGED\*

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#### THE PROBLEM

The purpose of this pilot study was to investigate the effectiveness of "Ritalin,"\*\* a new central-nervous-system stimulant and anti-depressant in facilitating psychotherapy in depressed patients of the involutional age group.

# Specific Questions

The total problem lent itself to three subdivisions in procedure:

- 1. A group of patients including both those with reactive and with involutional depressions, undergoing psychotherapy and simultaneously receiving ritalin, were evaluated regarding changes in alertness, sense of well-being, dissipation of morning fatigue; co-operativeness in psychotherapy, and ability to function socially and otherwise.
- 2. A group of patients including both those with reactive and with involutional depressions, undergoing psychotherapy and not receiving ritalin (a placebo was substituted), were evaluated in regard to changes in alertness, sense of well-being, dissipation of morning fatigue, co-operativeness in psychotherapy and ability to function socially and otherwise.
  - 3. The two groups were compared as to the factors investigated.

## **Delimitations**

The study was limited to 54 persons in the sixth and seventh decades of life. Patients recognized as manic-depressives were excluded from this study. Twenty-seven received ritalin in doses ranging from 10 to 30 mg. three times in the first eight hours of the day, at spaced intervals. Twenty-seven received placebos during the first eight hours of the day at spaced intervals. Both groups received little information about the drug used except to be told that its essential function was as an aid in psychotherapy. All patients were considered fair to good extramural risks, that

<sup>\*</sup>Presented before the ninth annual scientific meeting of the Geronotological Society, Chicago, November 9, 1956.

<sup>\*\*</sup>Ritalin (methyl-phenidylacetate hydrochloride) was supplied for this study by the Ciba Pharmaceutical Company.

is, the suicidal risk was considered minimal. The psychotherapy was psychoanalytically oriented. The goals were limited; the primary ones being either to maintain the individual in, or return him to, his home, social and work situation as an effective unit.

All patients were seen privately in the doctor's office. The frequency of visits ranged from three times weekly to one in two weeks. The duration of each visit was from 30 to 45 minutes. The total duration of treatment ranged from two to six months.

All patients were seen following referral from other physicians who had evaluated them organically and cleared them for psychiatric treatment. Where hypertension or other cardiovascular disease was present, this condition was followed by the referring physician. Diabetes, gastro-intestinal disorders, and aging disabilities did not exclude patients from this study. Continuing checks were maintained on blood pressure, pulse rate, complaints of headaches, dizziness, palpitation, nausea, appetite, sleeping habits, etc.

The study was limited to the factors mentioned under Specific Questions.

# Basic Assumptions

It is assumed that certain drugs can modify mood, attention, appetite and sleeping habits.

# Basic Hypotheses

Several recent studies by Drassdo and Schmidt,<sup>1</sup> Ferguson,<sup>2</sup> Carter,<sup>3</sup> and the author<sup>4</sup> have indicated that ritalin induced alertness, improved psychomotor performance and elevated mood without the production of sympathomimetic side effects seen with the amphetamines and caffeine.

It was hypothesized that patients receiving ritalin, including both those with reactive and involutional depressions in the sixth and seventh decades, would be more receptive to, or more cooperative with, psychotherapy than similar patients receiving a placebo.

#### THE NEED FOR THE STUDY

Ever-increasing, are the problems of dealing with the geriatric patients. The number of such patients swells by the day; and as progress in medical research and refinement in medical therapeutic technics continue, so will the life span of mankind stretch farther. Among the problems often confronting the physician treating the

geriatric patient is that of dealing with an un-co-operative, depressed patient who cares little if at all about his surroundings, himself, or his future. Such a patient may or may not have organic pathology; generally however, his mood alteration, that is, his depression, is accompanied either by psychomotor retardation or agitation. Often his thoughts, though slowed and even painful, may be filled with ruminations of suicide in addition to a great deal of self-recrimination, self-condemnation; and retrospective preoccupation with mishaps or missed opportunities, each now attended by a staggering weight of guilt. It would be almost too much to expect such a troubled person to be able to co-operate in a medical and/or nursing regimen designed to better his condition—and generally this lack of co-operation is borne out in clinical practice. These patients are often referred for psychiatric care.

The psychiatrist is then confronted by the same problem. His patient is depressed, preoccupied with thoughts of failure, guilt and painful recollections. He is slow in responding to outer stimuli, or, perhaps, is even indifferent to them. In time, if this picture is permitted to continue, thoughts of suicide will present themselves as a solution of the dilemma of futility. The thought can in time father the act.

The treatment procedures indicated at this point will be either electric convulsive therapy and/or certification to a well-supervised psychiatric facility. The suicidal risk will determine the degree of security precautions necessary. However, very often, and, in fact, with increasing frequency, patients are referred who have not yet begun to consider suicide as the only solution to their suffering. They can, therefore, be treated without elaborate security precautions. Because of the difficulty in establishing a two-way open communication with the patient, psychotherapy alone, in almost any form, is generally unrewarding. For over a decade, electric convulsive therapy has been the technic par excellence for such patients. (There is no need to go into its rationale or other indications here.)

Of late, there have been an increasing number of attempts to break the communication barrier with these patients pharmacologically—so as to permit psychotherapy to proceed. Drugs such as the amphetamines have been used extensively. In practice with mildly depressed persons, an amphetamine preparation will

frequently effect an elevation of mood. This is too often, however, followed by a rebound depression or letdown worse than the original depression. For this reason, patients will frequently refuse to continue with such medication. Search, therefore, has continued for preparations which will produce a mild elevation of mood without undesirable side effects or after-effects. Ritalin seemed to the writer to "fit the bill" best of several preparations tried in clinical practice. This present study was undertaken in an attempt to evaluate ritalin's effectiveness in permitting psychotherapy with a mild-to-moderately-depressed patient.

### RELATED LITERATURE

Ferguson and Funderburk,<sup>5</sup> in using ritalin combined with serpasil to improve the behavior of geriatric patients, noted a "marked mental awakening of the patients to the degree that they were better able to participate." They found neither advanced age nor cardiac disease to be a contraindication. "The drugs not only reduced the burden of nursing care but also opened up possibilities of psychotherapy on some patients who had been confined for more than forty years."

In a previous paper the writer reported on the increased rate of improvement brought about by using ritalin with depressed patients. In particular, he was impressed by the increase in alertness, the dissipation of early morning depression and fatigue, and the lack of evidence of addiction. The usefulness of ritalin in counteracting the lethargy or oversedation of ataraxic drugs was also mentioned.

Pennington<sup>6</sup> has recently reported favorable mood-elevating effects on a large group of patients in a mental hospital setting, all of whom were classified as chronic and as previously nonresponsive to therapy, including electric shock treatment, ataraxics and psychotherapy. Many of these patients were in the schizophrenic category. With ritalin added to ataraxics, a significant improvement occurred, both in behavior and in their ability to communicate.

Carter<sup>3</sup> found ritalin of use in overcoming reserpine-induced lethargy and depression, particularly in epileptic children. Young patients who could not be controlled by anticonvulsants, because of the sedative effects of the necessarily large doses, became more manageable with ritalin.

#### PROCEDURE IN COLLECTING DATA

The 54 patients of the present study were selected over an 18month period from a psychiatric office practice. All were between 60 and 74 years of age; both sexes were included; all were white and of middle income status; and all were considered to be depressed by both the referring physicians and the writer. In each instance the patient would ordinarily have been considered for electric shock treatment, and some patients in the control group were finally referred for such therapy. The patients were assigned alternately to the ritalin and control groups, the ritalin dosage varying according to the patient's responsiveness. The 27 patients not receiving ritalin received placebos. All patients were told that the medication was an "aid in therapy," its prime purpose being to life one's spirits and enable a patient to co-operate better with the psychotherapeutic process. Even for the group receiving placebos, the number of pills given was varied from time to time, as would be the case in giving effective medication.

#### PROCEDURE IN TREATING DATA

A case history approach was used with all patients. The following two were representative of the responses in the ritalin group:

#### Case 1

Patient 1 was a 63-year-old housewife, referred for psychiatric treatment because of a gradually increasing feeling of depression, most severe upon awakening, and diminishing toward evening. Tearfulness, increased irritability, insomnia, poor appetite, dissatisfaction with herself and her chores, and a hopeless outlook were becoming constant features of her illness.

She was given various ataraxics by her family physician without notable improvement. General concern by both her family and the attending physician finally resulted in referral for a more intensive psychiatric therapy.

Passive resistance to psychological investigation of her life experiences and personal background stalled psychotherapy. She could speak only with difficulty—and with constant prompting—of her complaints. Generally she would lapse into a silence, broken only by a few remarks that demonstrated her feelings of the futility of attempting anything. She denied suicidal preoccupation but became tearful when the subject was mentioned. Because of the difficulty in co-operating with a psychotherapeutic approach, caused by limited communication, she was started on ritalin, 10 mg., upon awakening, with this dosage repeated twice at two-

hour intervals. Chlorpromazine, 50 mg. orally was given at bedtime. Within a few days the dosage of the ritalin was doubled.

From the outset of treatment, the patient was seen twice weekly in 45-minute interviews. By the fourth interview, she had become more spontaneous in her speech; she spoke of her improved feelings, particularly in the morning; and stated that her appetite and sleep had both begun to return toward normal. The drug routine was continued without modification or interruption for the next two months. The psychotherapeutic interviews continued, with the patient now fully co-operative, gradually developing useful insight into her problems. She was able to integrate these insights into her present circumstances, and gradually her "good days" increased in number. By the third month, her chlorpromazine was discontinued, and her ritalin dosage was halved without a return of symptoms. All medication was discontinued after the fourth month. Psychotherapy was terminated in the sixth month. At six months post-therapy, her recovery was being maintained.

#### Case 2

Patient 2 was a 60-year-old man, a widower for three years, an employee of the telephone company; who had been seen first in psychiatric consultation in 1953 before his wife's death from a central nervous system malignancy. His depression was sufficiently severe, and his suicidal preoccupation marked enough to require him to be committed to a psychiatric facility where he had a course of electric convulsive therapy. His recovery from that episode progressed satisfactorily, and he was discharged after three months of hospitalization.

In the early part of 1956, he again began to experience depression, and he sought psychiatric help after two weeks. This time there was no suicidal preoccupation; he was still attempting to work but with great difficulty; his appetite had fallen off; his sleep was poor; and he complained of constant fatigue and of concern lest his condition again require hospitalization. He was co-operative in that he sought help voluntarily, had partial insight into his condition, and wanted to do whatever was possible to be well again.

Psychotherapeutic interviews were started three times a week. Ritalin, 20 mg., after breakfast, repeated in the middle of the morning, was given in an attempt to maintain him at his job and dissipate his feelings of fatigue and depression. Improvement was gradual but noticeable within 10 days. The patient continued in his job—at first with questionable efficiency. Later, this improved. Medication and psychotherapy continued for three months. His very real problems in readjusting to life as a widower; his estrangement from his married children; the need for his own acceptance of his progressive physical limitations; and the need to develop avocational interests were dealt with in an atmosphere of patience and benevolent ac-

ceptance. Therapy was terminated in a gradual fashion by cutting the frequency of interviews. He has been followed on a monthly-visit basis, with no evidence of recurrence of his symptoms.

The following two cases were representative of the response of patients in the placebo group:

#### Case 3

Patient 3 was a widow of 73, who had been referred by her internist because of complaints of mixed anxiety and depression. She was said to have been an easily-irritated person with little patience for her children and grandchildren, yet really concerned over their welfare. She now found herself, from a financial standpoint, in the role of the matriarch of her family. She resented the responsibilities that were now hers.

Her husband had been a utilities executives of good caliber who easily assumed and handled all responsibilities of the home as well as of his business. His sudden death, several years previously, was reacted to by the patient with a fairly normal period of mourning which gradually subsided. Two years before coming for treatment, transient episodes of anxiety and hypochondriasis, accompanied by depression, began to occur. These episodes increased in frequency for a year, until she was hospitalized on several occasions for diagnostic studies at a local general hospital where her hypochondriacal concerns were demonstrated to be without organic foundation.

Though referred for psychotherapy by her physician she was unable to co-operate effectively in psychologic investigation of her difficulties because of her intense anxiety. Though various tranquilizer drugs had previously been used in modest dosages, she was now placed on rather high doses of chlorpromazine, and later, meprobamate. Her anxiety was gradually brought under control, but with a deepening of her depression and a significant psychomotor retardation. The placebo in place of ritalin was added to her drug intake, but without any change in the clinical picture.

Three weeks later, the placebo was replaced by ritalin, 20 mg. t.i.d. during the morning hours at two-hour intervals, and the improvement in mood was noted by the family and patient within a few days. She did not however co-operate effectively in psychotherapy because, the writer feels, of her inability to tolerate even minimal amounts of anxiety. She was instead satisfied to depend upon her "drug crutches" to stabilize her symptoms. This has continued.

#### Case 4

Patient 4 was a 61-year-old stockbroker, who had suddenly become depressed, agitated and unable to carry on his work. His complaints were of feeling anxious, uneasy and blue; and of having lost his appetite and his ability to drop off to sleep, or sleep the night through. He felt guilty

about his failure at work, was inattentive to his family, and had begun to neglect his own appearance. Though referred by his physician for psychiatric care, he was unwilling to co-operate and finally came for consultation, only upon pressure almost amounting to force from his family.

An interview with this resistive patient was generally unsatisfactory. Placebos in place of ritalin were given. No favorable change occurred, but after 10 days, concern over a gradually deepening depression forced his referral for electric convulsive therapy. The patient responded rather quickly to the latter and was able to return to work.

#### DISCUSSION

In all the writer's cases the primary therapeutic emphasis was upon psychotherapy. The patients' need for support, acceptance by others and help in coming to accept changes in physical, environmental and work status had to be dealt with. This was done within the framework of each person's personal life history and experiential background. Motivation and defenses were gradually exposed and examined in light of present reality needs.

Communication barriers are, of course, the enigma in psychotherapy. Depressed patients have difficulty, by the very nature of their illness, in sharing their thoughts and feelings with others. It is the impression that ritalin has a most useful place in opening this communication barrier to effective psychotherapy. In a recent paper, Hill and Patton' stress the belief that physical therapies without psychotherapy are frequently unsatisfactory. While the physical therapies may break up a psychotic impasse, they do not of themselves offer the patient much protection against immediate or future relapse. The writer concurs in this belief. Ritalin appears to facilitate psychotherapy.

This was borne out in the first two cases presented here. In the third case, though a placebo was actually used early, ritalin was finally substituted with some improvement. However the patient was unwilling to proceed with an investigation of the subsurface facets of her disorder.

Of the 27 cases where ritalin was used, marked improvement was observed in two; moderate improvement in eight; minimal improvement in 12. There was either no improvement, or further deterioration and need for physical therapies and/or hospitalization, in five cases.

In the 27 cases where a placebo was used; there was no instance of marked improvement; moderate improvement did occur in four;

minimal improvement was observed in seven. There was either no improvement, or further deterioration and need for recourse to other physical therapies and/or hospitalization, in 16 cases. (See the table.)

Comparison of Results with Ritalin and Placebo Control Group in Psychotherapy of Depressions of the Aged

|                     | Marked            | Moderate           | Minimal           | No                |
|---------------------|-------------------|--------------------|-------------------|-------------------|
|                     | Improve-<br>ment* | Improve-<br>ment** | Improve-<br>ment† | Improve-<br>ment; |
|                     | No.               | No.                | No.               | No.               |
| 27 ritalin patients | 2                 | 8                  | 12                | 5                 |
| 27 placebo patients | 0                 | 4                  | 7                 | 16                |

<sup>\*</sup>Full recovery.

It seemed apparent in this study that ritalin was a useful drug as an aid to psychotherapy for mild to moderate depressive states in the older age groups. The action of the drug appears to be that of a central stimulant of the cortex. From a clinical point of view, when used as described in this study, there are no significant side effects. Its euphoriant effect appears to be midway between that of amphetamine preparations and caffeine, but without the depressive letdown so often encountered with amphetamine preparations. Nausea or vomiting, and variation in blood pressure (even in hypertensives) were not encountered. Anxiety symptoms required control before ritalin could be used effectively. Ritalin was often used in this study with chlorpromazine, and, in a rare instance, sodium butisol was used at bedtime. It was found best not to prescribe ritalin after 4 p.m. in order not to interfere with sleep.

In mild depressions, the mornings are generally the worst periods of the day, and it was during this period that the drug was given. Though the great majority of the patients used it in 20 mg. tablet doses, repeated once or twice during the morning, the elixir form, made up to 10 mg. in 5 cc., was used in a few instances. Recently, as the injectible form has become available, it has been found to be a rather quick way of achieving a mild euphoria and logorrhea which, of course, facilitate the therapeutic process. On

<sup>\*\*</sup>Able to function effectively at home, socially and at work, but with occasional or minimal depressed feelings.

<sup>†</sup>Some improvement in depression, but not able to function effectively, requiring continuing treatment.

<sup>!</sup>Increase in depth of depression despite therapy.

occasion, ritalin was found to intensify anxiety symptoms. The increase in psychomotor response is not excessive, but is rather favorably viewed by the patient.

Research studies now under way in anesthesiology, in epilepsy, in narcolepsy and with psychotics, appear rather promising. The use of ritalin in counteracting the oversedation of ataraxics is growing.

#### SUMMARY AND CONCLUSIONS

A pilot study was undertaken to investigate the effectiveness of ritalin in the treatment of patients in the sixth and seventh decades who were receiving psychotherapy for depression. The psychotherapy was psychoanalytically oriented. A total of 54 patients was studied, one-half of whom received ritalin, the rest a placebo. All were ambulatory and considered fair-to-good extramural risks initially (that is suicide was not believed an imminent risk). The primary effectiveness of the drug in facilitating communication and co-operation appeared due to its mood-elevating effects. Some psychomotor stimulation without significant effect upon blood pressure was found. Of value was the absence of depressive letdown as the effects of the drug wore off.

Of the ritalin group of 27 patients, 22 showed minimal to marked improvement. Five patients showed no improvement and required hospitalization and/or electric convulsive therapy.

Of the placebo group of 27 patients, 11 showed minimal to moderate improvement; 16 required hospitalization and/or electric convulsive therapy.

Four brief case reports were included. Ritalin appeared to increase the effectiveness of psychotherapy with elderly depressed patients.

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