

The Practitioner's Dilemma: Depression or Early Dementia?

Richard A. Chaifetz,
Grant A. Killian

ABSTRACT. The clinical differentiation between depression and early dementia (non-specific type) is developed for the private practitioner. Eighteen repetitive items relating to the differential diagnosis between these two disorders are offered to assist the clinician in making a more accurate and reliable diagnosis based on current research findings.

INTRODUCTION

Approximately 40% of chronically hospitalized psychiatric patients are afflicted by an undiagnosed organic brain disease (Geschwind, 1976), and 20% of the population over 65 have dementia (Gruenberg, 1978). Similarly, 50% of psychiatric patients over 65 are admitted for depression (Myers et al., 1963), and 19% of the population over 65 suffer from either minor or major depressive disorders (Blazer and Williams, 1980). The difficulty in making the differential diagnosis between these two disorders occurs because they present the following similar symptoms: memory disturbance, psychomotor retardation, cognitive impairment, and personality change.

Early stages of dementia (non-specific) frequently, mimic depression. This is also seen in symptoms of depression which may mimic the early stages of dementia. The term "pseudo-dementia" has been used to refer to the manner in which depression mimics dementia (Kiloh, 1961). Alternate viewpoints consider the two disorders as interacting variables (Heidell and Kidd, 1975). The studies listed in Table I show the percent of patients found with depression co-existing with dementia when either disorder was the initial diagnosis. Table II refers to studies where the diagnosis was initially erroneous based on presenting symptoms, and later corrected to the alternate diagnosis.

Endogenous depression is the most frequently erroneous diagnosis of early dementia (Kiloh, 1961), yet no study has outlined the clinical differentiation between the two syndromes. However, the literature does yield some clinical signs and symptoms to aid the private practitioner in making a more valid and reliable diagnosis.

Memory and Recall

Nott and Fleminger (1975) found that severe memory disturbances were consistent with a diagnosis of dementia, and Liston (1979 a & b) found that memory impairment was the most frequent symptom in dementia. Depressed patients also perform poorly on measures of memory (Miller, 1975), however, improvement is noted after antidepressant medication (Sternberg and Jarvick, 1976). Early dementia patients do not often complain of memory impairment, while depressed patients frequently report memory loss. In addition, patients with dementia display intact remote memory, despite poor recent memory (Post, 1975).

Onset of Illness

Depression usually appears quickly and progresses rapidly, while the degenerative process of dementia tends to be insidious in onset and slow in course (McHugh and Folstein, 1979). In depression the history is more precise and the date of onset more certain (Wells, 1977), while in dementia onset with a short history is rare (Kiloh, 1961).

Emotional Lability

Nott and Fleminger (1975) view the clinical presentation of depression similar to the anaclitic depression of the infant, wherein the patient manifests physical symptomology such as appetite and sleep disturbance, weakness, dry mouth, constipation, and psychomotor retardation. These vegetative symptoms are less frequent in early dementia. In addition, according to Sim et al. (1966), symptoms such as headaches, focal neurological signs, muscular atrophy, and convulsions are rare in early dementia (although sometimes more apparent in the final phases) they may be more common with specific organic illnesses.

Diurnal Variation

Endogenously depressed patients are usually worse symptomologically in the morning, while demented patients are worse late in the day due to fatigue (Parr, 1955). In addition, diurnal variation of mood and appetite along with early morning waking are more characteristic of depression than dementia (Post, 1975).

Coping Mechanisms

Demented patients often conceal symptoms and impairment through mechanisms such as changing the subject, avoiding questions, or keeping written notes (Bower, 1971; Wells, 1979). Thus it is found that "near miss" responses to questions and denial of errors (Weinstein and Kahn, 1955) are more consistent with dementia, while depressed patients may respond with "don't know" type answers and complaints relating to changes in their mental functioning (Post, 1975).

Computerized tomography (CT) and the electroencephalogram (EEG) cannot definitively rule out or confirm the presence of dementia (Wells, 1979). The only reliable diagnosis of dementia occurs with histological examination (Tomlinson et al., 1970; Katzman, 1979; Liston, 1979 a & b). However, lateralized neurological signs are consistent with organic conditions, so that such procedures as the Face-Hand Test (Fink et al., 1952) may provide significant data to aid the private practitioner in making a differential diagnosis.

Mental Status Examination (MSE)

Depressed patients are usually oriented on the mSE, while demented patients, especially in later stages typically perform poorly (Cohen, 1967; McHugh and Falstein, 1979). Several studies have reported on the high validity of the MSE in diagnosing dementia (Kahn et al., 1960; Irving et al., 1970; Liston, 1979 a & b; Gurland, 1980). Thus, the MSE, as a simple interviewing tool, can help the practitioner in formulating a more valid diagnosis.

Psychological Tests

Orne (1955) and Kendrick (1972) used a series of tests to differentiate dementia from non-dementia, however, the results were only moderately successful. They found that the Mill Hill Vocabulary score, the Wechsler Adult Intelligence Scale (WAIS) and the Progressive Matrices used in a test/retest sequence seemed to be effective in differentiating between depression and dementia in the age group above 60, with demented patients performing poorer in terms of intellectual productivity. Nevertheless, according to Post (1975), when clinical methods cannot firmly support a diagnosis, psychological testing usually produces equally questionable results.

RECOMMENDATIONS

The concept of dementia is neither a well defined entity, nor clinically unique in its presentation. Yet, the literature does yield some clinical signs and symptoms that may aid in making a differential diagnosis; however, none of these may be considered pathognomonic of either illness. Table III may serve as a brief check list to assist in more accurately differentiating the two disorders.

These signs and symptoms can serve as a guide for the private practitioner to more precisely evaluate patients and increase diagnostic reliability. Further research is needed to isolate clinical stages in dementia in order to clear up some dilemmas of previous studies. This brief check list can function as an additional aid for the private practitioner until further research is available on these items (research in progress).

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TABLE I

PERCENT OF PATIENTS WITH DEPRESSION CO-EXISTING WITH DEMENTIA

AUTHOR	% of Patients with Mixed State
1. Ziegler (1954)	15
2. Sim and Sussman (1962)	50
3. Lipowski and Kiriakes (1972)	30
4. Reifler et al. (1981)	25

TABLE II

PERCENT OF PATIENT WITH ERRONEOUS INITIAL DIAGNOSIS

AUTHOR	% of Patients
1. Gustafson (1975)	30 (depression changed to dementia)
2. Haward (1977)	35 (dementia changed to depression)
3. Liston (1977)	25 (depression changed to dementia)

TABLE III

CLINICAL CHECKLIST

DEPRESSION

1. complaints of early memory impairment.
2. memory impairment usually diffused and circumscribed.
3. symptoms appear quickly and progress rapidly.
4. a probable certain date of onset.
5. a probable precipitating event.
6. a personal or family history of affective disorder.
7. mood consistent with depression: e.g., dysphoria, failure, guilt, and feelings of loss.
8. vegetative physical symptoms: e.g., dry mouth, constipation, appetite and sleep disturbance.
9. symptoms worse in the morning.
10. complaints about loss of functioning.
11. tendency to give "don't know" responses.
12. negative CT and EEG findings are consistent with depression, but since they are not pathognomonic so caution against false negatives.
13. generally not disoriented on MSE.
14. no evidence of lateralization on Face-Hand-Test.
15. no aphasic symptomatology.
16. intellectual productivity less impaired on sensitive tests.
17. no obvious intellectual impairment on less stable WAIS subtests.
18. no significant difference in cognition over time.

B. DEMENTIA

1. denial of early memory deficits.
2. intact remote memory, poor recent memory.
3. indistinct onset and slow course.
4. an uncertain date of onset.
5. no apparent precipitating event.
6. a family history of dementia.
7. lability of mood and affect not normally seen in early stages.
8. no obvious vegetative symptoms during the early stages.
9. symptoms worse later in the day due to fatigue.
10. denial about loss of functioning.
11. tendency to give "near miss" responses in early stage.
12. positive CT and EEG findings are consistent with dementia, but they are not pathognomonic so caution relating to false findings.
13. errors on MSE.
14. evidence of lateralization on Face-Hand-Test.
15. aphasic symptoms may be manifest in later stages.
16. intellectual productivity impaired on sensitive tests.
17. loss of intellectual functioning on less stable WAIS subtests (e.g., similarities and comprehension).
18. continual deterioration in cognition over time.