

Organic Brain Dysfunction and the Difficult Patient

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Sixteen patients considered "difficult" by the staff of a family practice center were matched for age and sex with sixteen "average" patients, and both groups were tested on two standard indicators of organic brain dysfunction. Both groups of patients showed abnormal impairment of visual-motor coordination, with greater impairment among the difficult patients. Difficult patients showed significantly greater impairment of verbal abstract reasoning, indicating problems with cognitive skills. These findings suggest the presence of organic brain dysfunction among the difficult patients, yet none carried a diagnostic listing or hypothesis of organicity. With the current emphasis upon the "biopsychosocial" medical model, patients with organic brain impairment may be mislabeled with psychiatric or psychosocial diagnoses.

The patient who presents problems for the physician has gone by many names in the literature: difficult patient, problem patient, hateful patient, malingerer, and manipulative patient. Malcolm et al¹ summarized the problem patient's description from a questionnaire completed by family physicians as presenting with "diffuse problems of a functional nature." Neill² summarized responses from a group of resident physicians on the difficult patient as "characterized by his demanding behavior."

Patients known to suffer from organic brain syndrome have been similarly described. Chapman and Wolff³ characterized patients with diffuse disease of the cerebral hemispheres as having "impaired capacity to express appropriate feeling and drives; maintain appropriate thresholds and tolerance for frustration; and employ effective and modulated defense reaction." Wells⁴ described the demented patient in the earlier phases of his disease as "centering his attention on various somatic complaints, previously presenting de novo, for which no adequate organic cause can be found."

The relationship between organic brain dysfunction and the difficult patient has been previously explored. Goodwin et al⁵ found a positive correlation between organic brain dysfunction in a group of patients with systemic lupus erythematosus and dislike for these patients by their physicians. Rosen and Weins⁶ found that 9 percent of

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medical patients referred to a psychological clinic were diagnosed as having organic brain syndrome. Further, the frequency of outpatient visits, diagnostic services, and presenting problems was significantly reduced after the diagnosis of organic brain syndrome was made.

An exploratory study was designed to determine whether a "difficult" patient population would show a significantly higher incidence of signs of organic brain syndrome than a matched control group of general primary care medical patients. Two different aspects of higher brain function were measured: abstract verbal reasoning and visual-motor coordination. It was reasoned that the demanding behavior of somatic complaints that characterize the difficult patient was related to organic brain dysfunction.

Methods

Patient Population and Selection

The Asheville Family Practice Center provides longitudinal experience in primary care for family practice residents. During the 1980 to 1981 period of the study, there were 6,500 active patients on file in the care of 24 resident physicians and three faculty physicians. A questionnaire was distributed among physician faculty, nursing staff, and resident physicians in the Asheville Family Practice Center asking respondents to identify patients who "presented with a puzzling or confusing range of symptoms, including mental, emotional, and/or physical." The terms *difficult* and *problem* were excluded from the questionnaire because of their negative connotation and the lack of a standard definition of these terms as they apply to patients.

Thirty-nine patients were identified by this questionnaire. The average age of these patients was 57.4 years, and 93 percent were female. Of these 39 patients, 12 were excluded from the study because they lived too far from the Family Practice Center to be tested economically. Of the remaining 27 patients, 6 could not be reached, 3 refused to cooperate, 1 was hospitalized in a nursing home with a disabling neurological disease, and 1 was in a psychiatric hospital.

Controls for the remaining 16 "difficult" pa-

tients were chosen from the general Family Practice Center patient population. Each control was matched for age and sex with one of the 16 difficult patients. The mean years of age were 63.6 years (range 34 to 87 years) and 61.6 years (range 34 to 85 years) for difficult and control patients, respectively. Mean years of education completed by the difficult and control patient groups were 8.6 years (range 1 to 17 years) and 9.1 years (range 3 to 17 years), respectively. These differences were not statistically significant. Ninety-four percent of the difficult and control patients were female. There were significantly more divorced (28 percent) and fewer married persons (25 percent) among the difficult patients compared with the control patients ($\chi^2 = 9.17, P < .01$).

Instruments

The Wechsler Adult Intelligence Scale (WAIS)⁷ is a comprehensive test of higher brain function. It consists of 12 subtests that measure various aspects of verbal or task performance ability. The similarities subtest requires the patient to report "what is similar" about a series of pairs of objects. Patients with organic brain dysfunction are often unable to provide abstract answers.⁸ For example, when asked to tell how a table and chair are similar, an abstract answer would be "both are furniture"; a patient with organic brain dysfunction might answer with the more concrete "both are made of wood" or "both have legs."

The Bender Gestalt Test,⁹ a brief test of visual-motor coordination, has long been used as a screening test for organic brain syndrome.¹⁰ This test consists of nine geometric designs. Patients are asked to copy each design on a sheet of paper. Typical signs of organic impairment include 90° rotations of designs, repetition of designs (perseverations), and general poor quality of reproduction. Several scoring systems for the Bender Gestalt Test were compared by Lacks and Newport.¹⁰ They found that the Hutt Adaptation of the Bender Gestalt Test (HABGT)¹¹ could be used with "high diagnostic efficiency to discriminate organic psychiatric patients from patients with mixed non-organic psychiatric disorders."¹⁰ Furthermore, the HABGT was designed for clinical use as well as

Table 1. Mean Scores and Range on Screening Tests for Organic Impairment				
	Difficult Patient Group (n = 16)		Control Patient Group (n = 16)	
	Score	Range	Score	Range
Similarities subtest	6.1	(0-13)	9.9*	(3-19)
Hutt Adaptation of the Bender Gestalt Test	65	(18.5-118.25)	55	(20-95)
*P < .005				

research purposes,¹¹ making it an ideal choice for use in the present study.

Procedure

The study was introduced to patients as an exploration of visual-motor coordination and abstract vs concrete reasoning. Written consent forms were obtained from each participant. Standard instructions from the WAIS similarities subtest and the Bender Gestalt Test were given to each patient. Testing was done in the Family Practice Center or in the patients' homes by one of the authors (JAS).

The similarities subtest was scored by the standard procedure described in the WAIS manual.⁷ Scaled scores, based on age and sex norms provided in the WAIS manual, were used for analysis. The Bender Gestalt Test was scored by an independent psychologist who was experienced in the use of the HABGT scoring system. The scorer was unaware of the intent of the study and the identity of the patients. The HABGT system utilizes individual test protocols that yield scores on 17 test factors and a sum-total scaled score. The total scaled score was used for analysis. Comparisons between the difficult and control patient groups were carried out using the *t* test for matched pairs¹²; *P* less than .05 was considered significant.

Results

A summary of results obtained from each test is shown in Table 1. Obtainable scores on the similarities subtest range from 0 to 19. The difficult patient group had a significantly lower score on the similarities subtest than did the control group, indicating greater impairment of abstract reasoning. Seventy-five percent of the difficult patients scored lower than one standard deviation below the age-standardized mean vs 38 percent of the control patients.

Possible scores on the HABGT range from 17 to 163.25, with more errors on the Bender Gestalt resulting in higher scores. The HABGT scores of the difficult and control patient groups indicate a high degree of visual-motor impairment in both patient groups. Hutt¹¹ reported that a group of hospitalized organically impaired patients obtained a mean HABGT score of 103.8, whereas a group of college students obtained a mean score of 33.8. If an HABGT score of 74 or greater is considered to suggest organicity, then 37 percent of the difficult patient group had scores suggesting organicity vs 12 percent of the control patient group. Hutt also observed greater variability in the HABGT scores of organically impaired patients compared with those of "normals." There was greater variability in the HABGT scores of the difficult patient group (variance = 701.1) compared with the control patient group (variance = 397.1), but the difference was not statistically significant. Average time for completion of the Bender

Gestalt Test was 9.7 minutes (range 2 to 18 minutes) for the difficult patient group and 8.2 minutes (range 2 to 15 minutes) for the control group. This difference was not statistically significant.

Discussion

The results of this exploratory study supported a greater impairment of abstract verbal reasoning among "difficult" vs matched control patients. Difficult and control patients both showed impaired visual-motor coordination, with greater variability among the difficult patients, also consistent with a significant incidence of organicity in the difficult patient group. Impaired verbal reasoning more than visual motor coordination could affect the physician-patient dialogue by impeding cognitive skills.

To be an "easy" or rewarding patient may require conceptual skills—for understanding simple explanations of causes, course, and treatment regimens, for organizing a clear history of one's complaints, and sometimes for understanding complex ideas such as mind-body stress relationships and the notion of emotional pain causing physical distress. All these areas of cognitive function could be impeded by significant organic impairment. Some organically "difficult" patients might complain persistently about here-and-now bodily symptoms in a way that is relatively impervious to relief through cognitive channels.

These speculations notwithstanding, caution must be exercised in any generalization of these results beyond the present sample, given the small number of predominately female subjects whose mean age was 63 years. Other studies have found a statistical excess of women among problem patients¹³ and patients who present psychosocial problems.¹⁴ As yet there is no clear explanation of the relationship between difficult patient status and age, sex, or marital status.^{14,15}

Further research with difficult patients should be based on increased sample sizes and should explore operational definitions of the difficult patient that will allow an empirical description of the various subgroups within this broad category. Such research might uncover other aspects of im-

paired higher brain function in some subgroups of the difficult patient population.

Studies have noted the frequency with which organic brain dysfunction has gone unrecognized by nonpsychiatric medical personnel.^{16,17} This was also found to be true in this study. None of the difficult or control group patients carried diagnoses of organic mental disease. A higher index of suspicion for organic mental disease in relation to difficult patients, especially in older patients,⁸ may lead the physician to develop a more satisfactory relationship with his or her patient. There are brief, comprehensive screening tests for organic brain syndrome that have been validated in medical patients.¹⁷ Certain subtle impairments, short of full-blown organic brain syndrome, may require assessment by a trained psychiatrist or psychologist for diagnosis.

References

1. Malcolm R, Foster HK, Smith C: The problem patient as perceived by family physicians. *J Fam Pract* 5:361, 1977
2. Neill J: The difficult patient: Identification and response. *J Clin Psychiatry* 40:209, 1979
3. Chapman L, Wolff H: Disease of the neopaleum and impairment of highest integrative function. *Med Clin North Am* 42:677, 1958
4. Wells C (ed): *Dementia*. New York, FA Davis, 1971, pp 1-11
5. Goodwin JM, Goodwin JS, Kellner R: Psychiatric symptoms in disliked medical patients. *JAMA* 241:1117, 1979
6. Rosen J, Weins A: Changes in medical problem and use of medical services following psychological intervention. *Am Psychologist* 34:420, 1979
7. Wechsler D: *Manual for the Wechsler Adult Intelligence Scale*. New York, The Psychological Corporation, 1955, pp 39-40, 60-62, 101-110
8. Mattis S: Mental examination for organic mental syndrome in the elderly patient population. In Bellak L, Karasu FB (eds): *Geriatric Psychiatry*. New York, Grune & Stratton, 1976
9. Bender L: *A Visual Motor Gestalt Test and Its Clinical Use*. New York, The American Orthopsychiatric Association, 1938
10. Lacks PB, Newport K: A comparison of scoring systems and level of scorer experience of the Bender-Gestalt Test. *J Pers Assess* 44:351, 1980
11. Hutt M: *The Hutt Adaptation of the Bender Gestalt Test*. New York, Grune & Stratton, 1969
12. Runyon RP, Haber A: *Fundamentals of Behavioral Statistics*, ed 2. Reading, Mass, Addison-Wesley, 1971
13. McGaghie WC, Whitenack DC: A scale for measurement of the problem patient labelling process. *J Nerv Ment Dis*, in press
14. Brennan M, Noce A: A study of patients with psychosocial problems in a family practice. *J Fam Pract* 13:837, 1981
15. Crutcher JE, Bass MJ: The difficult patient and the troubled physician. *J Fam Pract* 11:933, 1980
16. Engel G, Romano J: Delirium, a syndrome of cerebral insufficiency. *J Chron Dis* 9:260, 1959
17. Jacobs J, Bernard B, Degalo A, et al: Screening for organic mental syndromes in the medically ill. *Ann Intern Med* 86:40, 1977