Problems in the Diagnosis of Intermittent Explosive Disorder

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The authors studied the accuracy with which intermittent explosive disorder was diagnosed in a university hospital setting. An index of diagnostic features abstracted from the description of intermittent explosive disorder in DSM-III *was used for chart review. Diagnosis of the disorder was made in 20 out of 830 admissions (2.4%). In 14 cases (1.7%) it was a primary one; in another five (.6%) it was secondary; and in one case (.1%) it was tertiary. The authors discuss the varied rigorousness of the diagnosis and the importance of using an index of diagnostic features to enhance diagnostic accuracy.*

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Intermittent explosive disorder is a newly formulated disorder of impulse control described in *DSM-III*. It is a rare diagnosis and no literature is available regarding its incidence and prevalence. It is one of six disorders of impulse control (pathologic gambling, kleptomania, pyromania, intermittent explosive disorder, isolated explosive disorder, and atypical impulse control disorder). In early *DSM-III* field trials, all six of these disorders as a group were diagnosed in 1.8% of 339 adult cases submitted to practitioners for diagnostic reliability and in 2.8% of 71 diagnoses made in patients under the age of 18 years (see *DSM-III*, pp. 467–481).

Intermittent explosive disorder replaces the *DSM-II* term "explosive personality." Diagnosis is made on the basis of descriptive features outlined in *DSM-III*, and many of the features are neurologic parameters which represent research findings of workers who have studied explosive personalities and patients with impulse disorders (1–5).

Because no data regarding intermittent explosive disorder exist, we sought to determine how often clinicians make the diagnosis. We were also interested in how rigorously the diagnosis is made by clinicians, that is, how often they use the *DSM-III* features to validate their clinical impressions.

METHOD

We assembled diagnoses of all intermittent explosive disorder cases made during a 2-year period at our university teaching hospital psychiatric unit. An index of diagnostic features was abstracted from the description of intermittent explosive disorder in *DSM-III* (see table 1). We conceptualized four groups of features on the basis of their prominence in the text. The most important group were the "diagnostic criteria," emphasized in *DSM-III* in the shaded gray portions and excerpted in the abridged quick-reference versions of *DSM-III*. A second group were called "essential" and were derived from the first paragraph of the text, which describes crucial phenomenologic aspects. These features are often prefaced with such qualifiers as "may be present" or "is often present" and are more vague than the four diagnostic criteria. A third group was labeled "associated," reflecting a paragraph under that heading. We labeled a fourth group "ancillary" simply because the features came under several headings such as age, course, impairment, and complications and seemed to be given less weight in the discussion of intermittent explosive disorder. We analyzed each case to determine whether the particular features were used to substantiate the diagnosis.

RESULTS

A total of 830 patients had been hospitalized during the study period, including readmissions. The diagnosis of intermittent explosive disorder had been made in 20 cases (2.4%). In 14 cases (1.7%) the diagnosis was a primary one. In another five cases (.6%) it was secondary, and in one case (.1%) it was tertiary. Three cases had been diagnosed in patients under the age of 18; two of these cases were primary diagnoses. One patient was reported twice (because of first and second admissions over an 8-month period by two different clinicians). The age range of our subjects was 17–41 years (median, 28.3 years). Sixteen (80%) were men and four (20%) were women.

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TABLE 1. Index of Features in 20 Cases of Intermittent Explosive Disorder

Feature Category	Positive Cases
Diagnostic criteria	
Discrete episodes of loss of control resulting in assault/destruction of property	14
Little or no provocation needed	9
Behavior out of proportion to precipitating factors	16
Not due to schizophrenia, antisocial personality disorder, or conduct disorder	18
Essential	
Episodes described as "spells" or "attacks"	1
Onset/remission in minutes or hours	5
Genuine regret at consequences of action	3
No generalized impulsivity/aggressiveness between episodes	0
Prodromal affective/autonomic symptoms	1
Subtle changes in sensorium during episode	1
Partial or spotty amnesia	3
Associated	
Hypersensitivity to sensory stimuli	0
EEG abnormalities	17
Signs/symptoms of limbic system dysfunction	6
Epilepsy	4
History of hyperactive motor behavior	1
History of proneness to accident	0
Ancillary	
Age at onset (20s–30s)	8
Social impairment	16
Complication: incarceration/hospitalization	15
Predisposing factors: alcohol, perinatal trauma, infantile seizures, head trauma, encephalitis	5
Sex (more common in males)	16
Familial pattern	1

TABLE 2. Positive Index Features in 20 Cases of Intermittent Explosive Disorder

Case	Number of Features Present				
	Diagnostic Criteria	Essential	Associated	Ancillary	Total
Primary diagnosis					
1	4	4	1	3	12
2	4	3	1	2	10
3	4	2	1	3	10
4	4	2	1	2	9
5	4	0	0	5	9
6	4	0	3	3	10
7	4	2	3	3	12
8	4	0	0	4	8
9	4	0	2	4	10
10	3	0	1	4	8
11	3	1	1	2	7
12	3	0	2	4	9
13	2	0	2	2	6
14	2	0	2	4	8
Secondary diagnosis					
15	3	0	2	3	8
16	2	0	0	4	6
17	2	0	3	3	8
18	0	0	1	2	3
19	0	0	1	3	4
Tertiary diagnosis					
20	1	0	1	1	3

Analysis of the charts indicates that the rigorousness of the diagnosis varied widely. Table 2 provides a summary of total positive index features. For example, in case 1, 12 positive features were described, four of which were "diagnostic criteria" and four "essential." In contrast, case 13 had six positive features, only two of which involved "diagnostic criteria," and there were no "essential" features. Secondary and tertiary diagnoses were generally made on weak grounds. Only nine of the 20 cases were validated by "diagnostic criteria," and all of these were primary cases. Clinicians rarely used the diagnostic criterion of little or no provocation needed to produce the explosive outbursts. On the other hand, the "associated" feature pertaining to EEG abnormalities was used by clinicians in 17 cases. But clinicians seemed to ignore other such "associated" features pertaining to neurologic signs and symptoms. They did use three of the "ancillary" features irrespective of whether the diagnosis was primary, secondary, or tertiary. These features were social impairment, complication, and male sex.

DISCUSSION

The diagnostic frequency of 2.4% for our sample appears high at first glance. Closer inspection reveals, however, that many diagnoses were made on questionable grounds. The fact that the four "diagnostic criteria" were cited in only nine cases (1.09%) was surprising. Equally surprising was the absence of "essential" and "associated" features save for the EEG feature. The citation of positive EEG findings may reflect both the availability of a private EEG laboratory within our psychiatric facility and the reliance our research group has placed on EEG abnormalities and behavioral impulsivity (1–5).

The sex distribution in our sample appears to conform to the *DSM-III* feature—number 22—specifying a higher incidence of intermittent explosive disorder among men. The mean age of our subjects (28.3 years) was somewhat higher than expected and we were unable to explain this.

We feel that intermittent explosive disorder is likely to be diagnosed the way explosive personality was, namely, on "soft" grounds. Use of an index ought to increase the rigorousness of the diagnosis by prompting the practitioner to ascertain the existence of descriptive features. Data obtained from the index will also ultimately help establish whether some features are extraneous to the diagnosis.

REFERENCES

1. Bach-y-Rita G, Lion JR, Climent CE, et al: Episodic dyscontrol: a study of 130 violent patients. Am J Psychiatry 127:1473–1478, 1971
2. Lion JR: Evaluation and Managment of the Violent Patient: Guidelines in the Hospital and the Institution. Charles C

Thomas, Springfield, Ill, 1972
3. Lion JR: Personality Disorders: Diagnosis and Management (revised for *DSM-III*), 2nd ed. Williams & Wilkins Co, Baltimore, 1981
4. Monroe RR: Episodic Behavior Disorders. Harvard University Press, Cambridge, Mass, 1970
5. Monroe RR: Brain Dysfunction in Aggressive Criminals. Lexington Books, Lexington, Mass, 1978

Polycystic Ovary Disease in Two Patients With Briquet's Disorder

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Luteinizing hormone, testosterone, and follicle-stimulating hormone were evaluated by radioimmunoassay in two patients with Briquet's disorder, secondary depression, and menstrual irregularity. In both patients a hormonal pattern consistent with polycystic ovary disease was documented. The ovaries of both patients showed the classic pathologic findings of this disease. These results suggest that the hormonal and ovarian pathologic abnormalities of polycystic ovary disease may be common in patients with menstrual irregularity and Briquet's disorder.
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Gynecological complaints have a prominent place among the symptoms of one of the major varieties of hysterical illness, Briquet's disorder (1). The most common of these complaints are dysmenorrhea, excessive menstrual bleeding, and menstrual irregularity, which occur in 48% of patients with Briquet's disorder (2). As with all the symptoms of Briquet's disorder, these gynecological complaints are labeled as "functional" because of negative results from standard physical examinations and routine laboratory testing. Nevertheless, the possibility exists that a subtle physiological abnormality may be associated with at least some of these symptoms.

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In this paper we present the results of endocrine evaluation of two patients with Briquet's disorder, irregular menstrual cycle, and normal physical examinations. Hormonal abnormalities compatible with polycystic ovary (PCO) disease were found in both patients, and the diagnosis was confirmed by direct pathologic examination of the ovaries.

METHOD

Serum testosterone, luteinizing hormone (LH), and follicle-stimulating hormone (FSH) were measured by radioimmunoassay (Smith-Kline Laboratories, Van Nuys, Calif.). The normal range of these hormones in women is as follows: serum testosterone, 30–100 ng/dl; LH, 2–30 mIU/ml in the follicular phase, 40–200 mIU/ml at the ovulatory peak, and 0–20 mIU/ml during the luteal phase; and FSH, 5–20 mIU/ml in the follicular phase, 12–30 mIU/ml at the ovulatory peak, and 5–15 mIU/ml in the luteal phase. Blood samples were collected between 8:00 a.m. and 3:00 p.m., with the patient in a sitting position. Diet was not controlled. Although both patients had taken oral contraceptives in the past, neither had taken any within 6 months of hormone testing. Blood samples were collected at several different stages of the menstrual cycle.

CASE REPORTS

Case 1. Ms. A, a 24-year-old single woman who had a 10-year history of irregular menstrual cycles, gastrointestinal complaints, and hyperventilation syndrome, was admitted to the hospital with a chief complaint of depression. Her depressive symptoms, which had persisted for more than 2 years, included insomnia, appetite disturbance with weight gain, exhaustion, restlessness, impaired mental concentration, loss of former interests, diminished libido, severe irrita-