Comparison of Patients With Early-, Typical-, and Late-Onset Affective Psychosis

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Objective: *The authors compared the clinical characteristics and family history of patients with early-onset (before age 18), typical-onset (at 20–25 years), and late-onset (after age 35) affective psychosis at the time of first hospitalization.* *Method:* *Diagnostic, symptom, and family history information was obtained from 88 consecutively hospitalized patients.* *Results:* *Major depression was more common in the late-onset group, and a family history of affective and substance abuse disorders was more common among the early-onset patients. Affective symptoms differed significantly among groups; specifically, early-onset patients had more energy, minimal sleep disruption, and greater suicidality, while typical-onset patients had more severe abnormal thought content.* *Conclusions:* *Among patients with affective psychosis, there may be heterogeneity of symptoms and family history associated with age at first hospitalization.*

(Am J Psychiatry 1997; 154:1299–1301)

In some psychiatric disorders, age at onset is associated with clinical and sociodemographic characteristics (1–3). For example, nonauditory hallucinations and persecutory delusions are more common in late-onset schizophrenia, while thought disorder and affective flattening occur more frequently in patients with early onset (1). Affective illness is more commonly found in relatives of patients with early onset of affective illness (before age 30) than of those with late onset (2, 3). However, it is unclear whether differences in age at onset among patients with psychotic unipolar depression or bipolar disorder are associated with differences in symptom expression or family history of psychiatric illness. Moreover, comparisons among patients with onset of affective psychosis in adolescence, young adulthood, and older adulthood have not been reported. To clarify these issues, we examined similarities and differences among patients with early-, typical-, and late-onset affective psychosis.

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Supported in part by grants from the Scottish Rite Benevolent Foundation schizophrenia research program, Northern Masonic Jurisdiction, the Ohio Department of Mental Health, and University of Cincinnati Medical Associates; NIMH grant MH-54317 (Dr. Strakowski); and the Theodore and Vada Stanley Foundation Bipolar Network, a program of the National Alliance for the Mentally Ill Research Institute (Drs. Keck and McElroy).

METHOD

Eighty-eight inpatients with bipolar or major depressive disorders with psychosis according to DSM-III-R criteria, who had no prior hospitalizations and minimal prior outpatient treatment, were recruited as part of a larger cohort of 109 patients with affective psychosis (4). Patients were excluded if their symptoms resulted entirely from acute medical illness, mental retardation, or acute intoxication or acute withdrawal of drugs or alcohol, as determined by symptom resolution within the expected period of acute intoxication and withdrawal, described previously (4). After complete description of the study to the subjects, written informed consent was obtained. DSM-III-R axis I diagnoses were evaluated with use of the Structured Clinical Interview for DSM-III-R—Patient Version (SCID-P) (5) administered by psychiatrists (S.M.S., P.E.K., S.L.M., and S.A.W.) with established interrater reliability (kappa=0.94). Patients were classified by their current age as having early onset (before the age of 18 years; N=27), typical onset (at 20–25 years; N=38), or late onset (after the age of 35 years; N=23) on the basis of the expected age at onset of affective disorders, the uneven distribution of the patients' ages, and the age ranges defined in previous studies (2). These age ranges were also chosen to maximize potential differences, although this excluded 21 patients from the analysis.

Symptoms were assessed with the Scale for the Assessment of Positive Symptoms (SAPS) (6), the 17-item Hamilton Depression Rating Scale (7), and the Young Mania Rating Scale (8). Ratings were typically made within 2–3 days after admission by research assistants with good interrater reliability, as previously described (9). Two typi-

TABLE 1. Demographic, Diagnostic, and Symptom Variables Among Patients With Early-, Typical-, and Late-Onset Affective Psychosis

Variable	Early-Onset Group (N=27)		Typical-Onset Group (N=38)		Late-Onset Group (N=23)	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*
Age (years)	16	2	23	2	49	12
Education (years)	9	2	13	2	12	2
	N	*%*	*N*	*%*	*N*	*%*
Female sex	13	48.1	15	39.5	13	56.5
Caucasian race	13	48.1	14	36.8	14	60.9
Diagnosis[a]						
Bipolar disorder	21	77.8	35	92.1	14	60.9
Major depression	6	22.2	3	7.9	9	39.1
Substance abuse	4	14.8	12	31.6	7	30.4
Family history (relatives assessed)	64		97		191	
Schizophrenia	1	1.6	2	2.1	3	1.6
Affective disorders[b]	15	23.4	10	10.3	17	8.9
Substance abuse[c]	14	21.9	6	6.2	24	12.6
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*
Hamilton Depression Rating Scale score[d,e]						
Insomnia						
Early	0.7	0.9	1.3	0.9	1.4	0.8
Middle	0.6	0.8	1.0	0.9	1.3	0.8
Late	0.7	0.8	1.2	0.9	1.0	0.9
Suicidality	1.4	1.7	0.5	1.1	1.0	1.4
Anxiety, somatic	1.1	1.3	0.7	0.7	1.2	1.1
Agitation	1.3	1.3	1.3	1.2	0.6	0.9
Young Mania Rating Scale score[d,f]						
Increased energy	2.1	1.6	1.5	1.4	1.0	1.3
Decreased sleep	0.9	1.2	1.9	1.2	1.5	1.2
Abnormal thought content	2.5	1.8	3.5	1.0	2.4	1.7

[a] χ^2=8.7, df=2, p<0.01.
[b] χ^2=10.0, df=2, p<0.01.
[c] χ^2=8.7, df=2, p<0.01.
[d] Symptom is listed if effect size was >0.50 for the group comparison.
[e] Overall F=1.7, df=34, 126, p<0.01.
[f] Overall F=2.0, df=22, 136, p<0.01.

cal-onset patients were excluded from symptom analyses because of missing data.

Family history data on first-degree relatives of 63 (72%) of the subjects were obtained. There were no demographic or diagnostic differences between subjects with and without family history data. Trained raters (kappa=0.71), blind to SCID-P diagnoses, administered a version of the Family History Research Diagnostic Criteria (10), modified to include the DSM-III-R criteria for schizophrenia, major depression, bipolar disorder, and substance use disorders.

Analyses were performed with the Statistical Analysis System (SAS Institute, Cary, N.C.). Analysis of variance, t tests, and chi-square analyses assessed differences in demographic variables, diagnosis, and family history. Three multivariate analyses of covariance (MANCOVAs) determined differences in SAPS, Hamilton depression scale, and Young Mania Rating Scale items among groups, with covariance for race, sex, substance abuse, and diagnosis. Symptoms endorsed by less than 15% of the subjects were excluded; these were tactile and olfactory hallucinations; voices conversing; delusions of jealousy, sin, being controlled, and thought broadcasting; bizarre appearance; repetitive behavior; incoherence; clanging; and illogicality from the SAPS. Analyses of these variables indicated they had minimal influence on overall group differences, as only illogicality significantly differed among the groups (F=3.3, df=2, 85, p<0.05). Since MANCOVA provides overall group differences in symptom profiles, we calculated effect sizes (d_s) to examine specific comparisons, as described previously (9).

RESULTS

Demographic and clinical variables are presented in table 1. Diagnosis differed among the groups, with major depression occurring more frequently in late-onset patients. Affective disorders and substance use disorders were more common in first-degree relatives of early-onset patients than in relatives of typical- and late-onset patients. There were no differences in the prevalence of familial schizophrenia (χ^2=0.1, df=2, p=0.90).

MANCOVA revealed significant overall differences between groups in symptom profiles on the Hamilton depression scale and the Young Mania Rating Scale but not the SAPS (F=1.2, df=32, 128, p=0.20). Hamilton depression scale items and Young Mania Rating Scale items that yielded effect sizes greater than 0.50 are listed in table 1. On the Hamilton depression scale, the early-onset group demonstrated less severe early (d_s=0.77), middle (d_s=0.69), and late (d_s=0.67) insomnia than the typical-onset group and less severe early (d_s=0.75) and middle (d_s=0.79) insomnia than the late-onset group. Early-onset patients were also more suicidal than typical-onset (d_s=0.52) and late-onset (d_s=0.54) patients. Late-onset patients exhibited lower agitation scores than early-onset (d_s=0.56) and typical-onset (d_s=0.63) patients and more severe somatic symptoms than typical-onset patients (d_s=0.63).

Analysis of Young Mania Rating Scale items revealed increased energy among early-onset patients in comparison with typical-onset (d_s=0.51) and late-onset (d_s=0.81) patients, and they had less sleep disturbance than typical-onset (d_s=0.78) and late-onset (d_s=0.62) patients. Finally, typical-onset patients had more severe abnormal thought content than early-onset (d_s=0.63) and late-onset (d_s=0.69) patients.

DISCUSSION

These results suggest a heterogeneity of affective symptom presentation, diagnosis, and family history of major affective and substance abuse disorders associated with the age at first hospitalization of patients with affective psychosis. Moreover, observed differences between early- and typical-onset patients suggest that there is a greater heterogeneity than was previously reported in studies that combined adolescent and young adult patients in the early-onset group (2).

Several limitations should be considered in the interpretation of these results. First, age at onset was defined

as age at first hospitalization, which may be temporally distinct from the prodromal phase or first emergence of symptoms. We also examined patients during the initial episode of psychosis rather than the first affective episode, which in some cases may have represented a different phase of illness. Second, the study group was small relative to the number of variables included. Replicating this study in a larger group is necessary to confirm these findings. Third, since these results apply to affective psychosis, the degree to which they also apply to nonpsychotic, affectively ill individuals is unclear. Finally, the degree to which substance abuse influenced symptom expression in the 23 subjects (26%) who reported it is unknown. However, the process of excluding cases in which symptoms resulted entirely from acute intoxication or withdrawal from drugs or alcohol (4) may have reduced this influence.

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