

# Strategies for Making an Accurate Differential Diagnosis of Schizoaffective Disorder

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To make an accurate differential diagnosis of schizoaffective disorder, clinicians can carefully gather information from patients and other informants, consider the information within a conceptual diagnostic framework, differentiate between schizoaffective disorder and other disorders, and reevaluate the diagnosis over time. Making an accurate diagnosis of schizoaffective disorder can be difficult because patients may remember insufficient detail of symptoms including their duration and overlap. Clinicians should realize that the diagnostic stability and interrater reliability of schizoaffective disorder are low. An accurate history of patients' signs and symptoms and their course and duration is essential to making a diagnosis. Careful documentation of symptoms and recording of the basis for diagnosis are crucial so that the diagnosis can be reevaluated over time.

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**M**aking an accurate differential diagnosis of schizoaffective disorder can be challenging. Clinicians need to carefully gather information from patients and other informants, consider the information within a conceptual diagnostic framework, differentiate between schizoaffective disorder and other disorders, and reevaluate the diagnosis over time.

## GATHER AND DOCUMENT INFORMATION

Reliable information about the signs and symptoms of the disorder, including their time course and duration, are necessary to obtain an accurate diagnosis of schizoaffective disorder. The initial patient evaluation is critical in gaining accurate information and making a diagnosis.

### Initial Psychiatric Interview

The initial psychiatric interview (Table 1)<sup>1</sup> has several components and includes a mental status examination. Patients often do not recall or keep records of the duration and time course of specific signs and symptoms of their disorder, but a tool like the Structured Clinical Interview for DSM-IV Axis I Disorders—Clinician Version (SCID-CV)<sup>2</sup>

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can help clinicians obtain an accurate record. Details can also be gathered from sources such as family members and prior records from other physicians.

### Mental Status Examination

Careful completion of the mental status examination is an essential part of the initial psychiatric interview (see Table 1). Clinicians should particularly assess the presence of mood disturbances, ie, mania and depression, and psychotic signs and symptoms. Information about the duration and intensity of signs and symptoms and about the extent to which symptom domains appear concurrently or separately can help to establish or eliminate schizoaffective disorder as the diagnosis.

## CONSIDER SYMPTOMS WITHIN A CONCEPTUAL FRAMEWORK

The relevance of obtaining an accurate record becomes acutely apparent when clinicians try to place a patient's symptoms within the framework of schizoaffective disorder in either the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision (DSM-IV-TR)<sup>3</sup> or the *International Classification of Diseases, Tenth Revision* (ICD-10).<sup>4</sup> Differing definitions of the disorder in the DSM-IV-TR and ICD-10 may vary diagnoses for some groups of symptoms.<sup>5</sup>

### DSM-IV-TR Criteria

The DSM-IV-TR criteria for schizoaffective disorder are summarized in Table 2.<sup>3</sup> During the course of illness, patients must experience an uninterrupted period of a mood episode concurrent with symptoms of schizophrenia (criterion A). In addition, delusions or hallucinations must occur in the absence of prominent mood symptoms (criterion B). Mood symptoms continue during the active and residual periods of psychosis and occupy a substantial portion of the total duration of the illness (criterion C). Durations are specified.

## FOR CLINICAL USE

- ◆ Take a careful history of the patient's symptoms (eg, duration, intensity, and co-occurrence), involving informants and previous medical records if possible.
- ◆ Document the findings carefully.
- ◆ Place the findings within the framework of *DSM-IV-TR* or *ICD-10* criteria, and differentiate schizoaffective disorder from other psychotic diagnoses.
- ◆ Reevaluate the diagnosis over time.

Schizoaffective disorder can be subdivided into bipolar type and depressive type. The bipolar type applies if the presentation includes a manic or mixed episode, or a manic or mixed episode and a major depressive episode. The depressive subtype is specified if only major depressive episodes occur.

**ICD-10 Criteria**

A brief summary of the differences between *DSM-IV* and *ICD-10* criteria is provided here<sup>4</sup>; for full details of *ICD-10* criteria, please refer to the *ICD-10* Web site: <http://apps.who.int/classifications/apps/icd/icd10online/>. In the *ICD-10 Clinical Descriptions and Diagnostic Guidelines*,<sup>4</sup> schizoaffective disorder is described as an episodic condition in which affective and schizophrenic symptoms of schizophrenia develop together, are equally prominent, and occur within the same episode. The affective and schizophrenic symptoms should preferably occur simultaneously but can occur within a few days of each other. The schizoaffective diagnosis should not be used if the symptoms of schizophrenia and affective symptoms occur only in separate episodes of illness.

Manic, depressive, and mixed type schizoaffective disorder are specified in *ICD-10*. At least 1 and preferably 2 of the following symptoms of schizophrenia should be clearly present during the mood episodes: thought interference; delusions of control, influence, or passivity, or delusional perception; hallucinatory voices; or other persistent delusions that are culturally inappropriate or humanly impossible.

In the *ICD-10* manic subtype, prominently elevated mood, or elevated mood accompanied by increased irritability or excitement, should occur within the same episode as symptoms of schizophrenia. In the depressive type, depressive symptoms and symptoms of schizophrenia are both prominent in the same episode. Depressed mood must be accompanied by at least 2 other depressive symptoms or behavioral abnormalities, ie, reduced concentration and attention, reduced self-esteem and self-confidence, ideas of guilt and unworthiness, bleak and pessimistic views of the future, ideas or acts of self-harm or suicide, disturbed sleep, or diminished appetite.

The *ICD-10* mixed type of schizoaffective disorder is diagnosed when the patient has had at least 1 manic,

**Table 1. Components of the Initial Psychiatric Interview and Mental Status Examination<sup>a</sup>**

## Initial Psychiatric Interview

1. Identifying data
2. Source and reliability
3. Chief complaint
4. Present illness
5. Past psychiatric history
6. Substance use/abuse
7. Past medical history
8. Family history
9. Developmental and social history
10. Review of systems
11. **Mental status examination**
  - Appearance and behavior
  - Motor activity
  - Speech
  - Mood
  - Affect
  - Thought content
  - Thought process
  - Perceptual disturbances
  - Cognition
  - Insight
  - Judgment
12. Physical examination
13. Formulation
14. *DSM* multiaxial diagnoses
15. Treatment plan

<sup>a</sup>Based on McIntyre et al.<sup>1</sup>

Abbreviation: *DSM* = *Diagnostic and Statistical Manual of Mental Disorders*.

hypomanic, or mixed episode and currently has either a mixture of or rapidly alternating manic, hypomanic, and depressive symptoms.

**Common Diagnostic Mistakes**

Most clinicians recognize *DSM-IV-TR* criterion A, but many omit criterion B and/or criterion C (see Table 2). Omitting these criteria can lead to misdiagnoses of the symptoms as major depressive disorder with psychotic features, bipolar disorder, or schizophrenia. Making an accurate diagnosis of schizoaffective disorder depends heavily on the chronology of the symptoms and the extent to which they overlap.

**DISTINGUISH SCHIZOAFFECTIVE DISORDER FROM OTHER DISORDERS**

Cognitive dysfunctions unique to specific diagnoses have not yet been clearly identified. Patterns of cognitive deficits in schizophrenia and schizoaffective disorder may be similar, but seem to differ from those in major depression, bipolar disorder, and Alzheimer's dementia.<sup>6</sup> Cognitive impairments might help to differentiate between psychotic disorders,<sup>7,8</sup> but cognitive dysfunctions unique to differential diagnoses have not yet been determined.<sup>9</sup>

A review<sup>10</sup> of neurobiologic studies concluded that information processing is identical between individuals with schizoaffective disorder and those with schizophrenia or other psychotic disorders, while emotional regulation is indistinguishable between those with schizoaffective disorder and those with mood disorders.

**Table 2. Summary of DSM-IV-TR Criteria for Schizoaffective Disorder<sup>a</sup>**

Schizoaffective Disorder Criteria and Subtypes	Duration
<b>Criterion A.</b> A period of illness during which, at some time, a major depressive, manic, or mixed episode is concurrent with 2 (or more) of the following symptoms: Delusions Hallucinations Disorganized speech (eg, frequent derailment or incoherence) Grossly disorganized or catatonic behavior Negative symptoms (ie, affective flattening, avolition, or anhedonia)	Uninterrupted period Significant portion of time during 1 month
<i>Note:</i> Only 1 symptom is required if delusions are bizarre or hallucinations consist of a voice keeping a running commentary on the person's behavior or thoughts, or 2 or more voices conversing with each other.	
<i>Note:</i> A major depressive episode must include depressed mood most of the day, nearly every day, as indicated by either subjective report or observation made by others.	2 weeks
<b>Criterion B.</b> During the same period of illness, delusions or hallucinations persist in the absence of prominent mood symptoms.	At least 2 weeks
<b>Criterion C.</b> Mood symptoms that meet criteria for a mood episode are present during the active and residual periods of the illness.	Substantial portion of total duration
<b>Criterion D.</b> The disturbance is not due to the direct physiologic effects of a substance (eg, a drug of abuse, a medication) or a general medical condition.	
<b>Subtypes</b>	
<i>Bipolar type.</i> The disturbance includes a manic or a mixed episode (or a manic or a mixed episode and major depressive episodes).	At least 1 week
<i>Depressive type.</i> The disturbance includes only major depressive episodes.	At least 2 weeks

<sup>a</sup>Based on the American Psychiatric Association.<sup>3</sup>

Abbreviation: DSM-IV-TR = *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision.

Genetic abnormalities may contribute to impairment in both information processing and emotional regulation among people with schizoaffective disorder.<sup>10</sup> Some individuals may have vulnerability for both schizophrenia and affective disorder.<sup>5,11</sup> The topics in this section are covered in more detail by Christoph U. Correll, MD, in "Understanding Schizoaffective Disorder: From Psychobiology to Psychosocial Functioning" in this supplement.<sup>12</sup>

### Schizophrenia

A study by Kendler and colleagues<sup>11</sup> suggested that, compared with patients with schizophrenia, patients with schizoaffective disorder have significantly more prominent depressive and manic symptoms, less severe negative symptoms and hallucinations, and better overall functioning ( $P \leq .05$  for all). Benedetti and colleagues<sup>13</sup> found fewer hallucinations (28% vs 48%), significantly fewer catatonic symptoms (20% vs 45%,  $P < .01$ ), and significantly fewer negative symptoms (58% vs 88%,  $P < .001$ ) in patients with schizoaffective disorder compared with those with schizophrenia. A history of affective illness in first-degree relatives is much more common in those with schizoaffective disorder than in those with schizophrenia ( $P = .03$ ), although the rate of schizophrenia in relatives is similar between the 2 groups.<sup>11</sup>

### Mood Disorders With Psychotic Features

When delusions or hallucinations occur exclusively during periods of mood disturbance, the diagnosis of mood disorder with psychotic features may be used.<sup>3</sup>

Kendler and colleagues<sup>11</sup> found that patients with schizoaffective disorder have significantly worse negative symptoms ( $P \leq .0001$ ) and worse overall functioning ( $P \leq .01$ ) than those with affective illness. Psychotic symptoms last longer in

schizoaffective disorder than they do in mood disorders,<sup>14</sup> and delusions are more likely in schizoaffective disorder than in bipolar disorder.<sup>15</sup> Reichenberg and colleagues<sup>8</sup> found significantly more severe negative symptoms in patients with schizoaffective disorder than in those with psychotic bipolar disorder or psychotic major depressive disorder ( $P < .05$ ), as well as significantly more severe depression in patients with schizoaffective disorder than in those with psychotic bipolar disorder ( $P < .05$ ). A family history of schizophrenia is more frequent in patients with schizoaffective disorder than in those with mood disorders ( $P = .02$ ).<sup>11</sup>

### Other DSM-IV-TR Psychotic Diagnoses

Several other DSM-IV-TR<sup>3</sup> diagnoses can be appropriate if patients do not meet full criteria for schizoaffective disorder.

**Schizophreniform disorder.** Symptoms of schizophreniform disorder should meet schizophrenia criterion A but do not meet the duration criteria, ie, they last at least 1 month but less than 6 months. Impairment of social and occupational functioning is not required.

**Brief psychotic disorder.** Brief psychotic disorder involves the sudden onset of at least 1 of the following symptoms: delusions, hallucinations, disorganized speech, or grossly disorganized or catatonic behavior. An episode lasts at least 1 day but less than 1 month, and the patient eventually returns to the premorbid level of functioning.

**Delusional disorder.** When a patient has delusional disorder, the only psychotic symptoms are delusions and thus do not meet criterion A for schizoaffective disorder. The delusions should not be bizarre (ie, the delusions involve real-life or plausible situations) and should persist for at least 1 month. Tactile and olfactory hallucinations may be present if they relate to the delusions.

**Substance-induced psychotic disorder.** When prominent hallucinations or delusions are the direct result of the physiologic effect of a drug of abuse, a medication, or exposure to a toxin, the diagnosis of substance-induced psychotic disorder is appropriate. The subtypes with delusions or with hallucinations can be used.

**Psychotic disorder not otherwise specified.** When delusions, hallucinations, disorganized speech, and grossly disorganized or catatonic behavior are present but do not meet criteria for other disorders, or when insufficient information exists, the best diagnosis may be psychotic disorder not otherwise specified.

### REEVALUATE THE DIAGNOSIS OVER TIME

The diagnostic stability and the interrater reliability for the diagnosis of schizoaffective disorder are low. Therefore, the diagnosis may need to be reevaluated periodically.

Longitudinal studies of patients with schizoaffective disorder indicate that the diagnosis may be unstable.<sup>5,10</sup> For example, Kendler and colleagues<sup>11</sup> found that 11.7% of individuals diagnosed with schizophrenia and 7.5% of those diagnosed with affective illness met DSM criteria for schizoaffective disorder at follow-up. Schwartz and colleagues<sup>16</sup> reported that the least stable diagnoses over 2 years in patients with psychosis were psychosis not otherwise specified, schizoaffective disorder, and brief psychosis, while the most stable diagnoses were schizophrenia, bipolar disorder, and major depressive disorder. Another study<sup>17</sup> found that schizophreniform disorder was the least stable diagnosis, while schizophrenia, schizoaffective disorder, and bipolar disorder were largely stable.

When clinicians' diagnostic reliability was examined,<sup>18</sup> only 1 of 15 schizoaffective disorder cases received a correct diagnosis by more than half of the clinicians; most of the schizoaffective disorder cases were diagnosed as schizophrenia. Another study<sup>19</sup> showed that Cohen's  $\kappa$  values for the reliability of diagnosis were 0.22 for schizoaffective disorder, 0.71 for manic episode, and 0.82 for major depressive episode.

### SUMMARY

The diagnosis of schizoaffective disorder is challenging. Making the diagnosis requires clinicians to (1) obtain enough information from patients and informants, (2) have a suitable conceptual framework of schizoaffective disorder, and (3) differentiate schizoaffective disorder from other psychotic diagnoses. Because the distinguishing features of the disorder emerge over time, making an accurate diagnosis depends on the care with which clinicians elicit an accurate history of signs and symptoms as well as document the time

course and duration of symptoms. Clinicians treating the patient at a later date need a clear idea of the basis on which previous diagnoses were made in order to confirm the diagnosis or elicit new information that might result in a change of diagnosis.

**Disclosure of off-label usage:** The author has determined that, to the best of his knowledge, no investigational information about pharmaceutical agents that is outside US Food and Drug Administration–approved labeling has been presented in this activity.

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