REFERENCES

We gratefully acknowledge the use of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders" for the diagnosis of mental disorders. The references are listed in the order of their appearance in the text.

APPENDIX

Additional information relevant to the study, including the evaluation of the data, is included in the appendix. The appendix contains tables and charts that provide further details on the study results.

SUMMARY

The study findings indicate that the target intervention was effective in reducing symptoms of depression and anxiety. The program was well-received by participants, with many reporting improvements in their mental health. The results suggest that further research is needed to determine the long-term effects of the intervention.
rate of 2% to 13% for the skin and 50% for the leptomeninges, the latter presumably going through a phase of atypia as in our patient. Other complications include hydrocephalus (possibly from obstruction of the flow of cerebrospinal fluid by the melanocytes), seizures, cranial nerve palsies, spinararachnoiditis, chronic subdural hematomas, or syringomyelia. Interestingly, disseminated pneumococcal infection has caused the death of another baby with neurocutaneous melanosis. The occurrence of pneumococcal infection in both the patient and our patient suggest that fatal pneumococcal infection may be more common in neurocutaneous melanosis than previously recognized.

Moses Adeyaniu, MD
Marc G. Reyes, MD
Division of Pathology (Neuropathology)
Cook County Hospital
Chicago, Illinois
Abisogun T. Junaid, MD
Department of Pathology
University College Hospital
Ibadan, Nigeria

References

Weinberg Screening Affective Scales (WSAS and WSAS-SF)

To the Editor: We have recently developed a questionnaire (Table 1), the Weinberg Screening Affective Scale (WSAS), that utilizes items linked to established criteria for depression in children (Table 2). From a recently completed study of depressive symptomatology in a large representative sample of nonreferred adolescents, the Weinberg Screening Affective Scale Short Form (WSAS-SF) was developed, and we suggest its usefulness in the screening of depression and potential suicide in that age group (Table 3). We believe it important that these two forms be readily available to child neurologists and workers in other disciplines for use in the recognition of depression in children and adolescents.

The long form WSAS can be used as a measure of self-report of depression, while the short form, WSAS-SF, can be used for the screening of depression and potential suicide in nonreferred populations. These two forms require a fourth grade reading ability, are easily administered, and take less than ten minutes to complete. Confirmation of depressive symptomatology and suicidal ideation (representing the illness of depression) requires, of course, clinical evaluation. This should be easily accomplished utilizing

| TABLE 1 |
| Weinberg Screening Affective Scale Long Form (WSAS) |

INSTRUCTIONS: We would like to ask you some very serious and very important questions. We want you to think about how you feel about yourself. If you agree with the statement, circle yes. If you do not agree with the statement, circle no. We consider these questions and your answers very important.

1. I will try to give my honest feelings on these questions.
2. I feel dumb and stupid too much of the time.
3. I can’t do my homework anymore.
4. I wish that I could stay in bed all day.
5. I don’t do anything right.
6. Sometimes I wish I were dead.
7. I don’t like other people.
8. I don’t like school anymore.
9. I feel sad too much of the time.
10. I can’t do my school work anymore. I feel too hard.
11. It’s hard to have any fun anymore.
12. School makes me feel sick.
13. I have too many bad moods.
14. This is not a good world.
15. I don’t want to eat anymore.
16. I feel lonely too much of the time.
17. I have too much trouble remembering things.
18. Nothing is ever done the way I like it.
20. I am not as good as other people.
21. It seems like I’m always in trouble for fighting and that is not fair.
22. I have gained too much weight.
23. I have too many headaches.
24. I don’t want to go to school anymore.
25. I don’t have fun playing with my friends anymore.
26. I feel too tired to play.
27. It seems like some part of my body always hurts me.
28. It makes me feel good to tease other people.
29. People are always talking about me when I’m not there.
30. I can’t sit still and that is a problem for me.
31. My friends don’t want to be with me anymore.
32. I’m too hard to get along with.
33. I can’t concentrate on my work.
34. I daydream too much in school.
35. I never seem to be able to finish my work in school.
36. I have too many stomach aches.
37. I have too many aches and pains in my muscles.
38. I don’t want to get out of bed in the morning.
39. I talk too much and that causes a problem for me.
40. I’m always grumpy and that’s bad.
41. It’s hard to fall asleep and that bothers me.
42. My friends don’t like me anymore.
43. When I wake up at night, it is hard to go back to sleep.
44. I am losing too much weight.
45. I cause trouble for everybody.
46. I don’t want to be with my friends anymore.
47. Everybody picks on me.
48. I get angry easily.
49. School makes me feel nervous.
50. I cry a lot.
51. I talk back to grown-ups.
52. I wake up too early in the morning and it is too hard to go back to sleep.
53. I can’t have any fun anymore.

Continued

TABLE 1 (Cont’d)

54. I think a lot about killing myself. yes no
55. My answers are how I have been feeling most of the time. yes no
56. These answers represent my honest feelings. yes no

the established criteria (Table 2) which consider depression to be an incapacitating medical illness. The Weinberg criteria for depression were established for the recognition of depression in children and adolescents, but are consistent with Research Diagnostic Criteria (RDC) and Feighner criteria for depression in adults.

The original Weinberg criteria for depression were transformed by Petti into the Bellevue Index of Depression (BID) and validated on hospitalized child psychiatric patients. Other reliability and validation studies have been performed. Poznanski et al. found the Weinberg criteria to be the most reliable in their comparative studies of the various published criteria for depression in children.

Clinically, the Weinberg criteria, which consist of ten major symptom categories and require the presence of dysphoric mood and self-deprecation plus two or more of the other eight major symptom categories, remain valid in recognizing both major depressive disorder and dysthymia in children and adolescents. However, in comparing the Weinberg criteria to the DSM-III criteria for major depression, it has been suggested, but not confirmed, that the Weinberg criteria are too inclusive. The false positives most likely relate to the inclusion of dysthyrmics, adjustment states with mood disturbance, and significant dysphoria without evidence of incapacitation or change from usual self. We have reported a modified Weinberg criteria for major depressive disorder in children and adolescents that correlates significantly with biological findings of this disease and are possibly more reliable than the DSM-III criteria. These modified criteria require the presence of dysphoric mood and self-deprecatory ideation plus four or more of the other eight major symptom categories.

Due to the prevalence of depression in young people as a leading cause of school failure, Incapacitation, and suicide, the development of a reliable self-report form to be used clinically and a screening form for population use has been a priority. A study of a large representative sample of non-referred adolescents was conducted. The sample comprised 3,294 high school students and represented 89% of all the students enrolled in health classes by school district records. The sample was representative of the school population with regard to race and sex: 55.4% were black, 23.8% white, 18.2% Hispanic, and 2.6% other racial groups; 50.7% were male. The mean age of the sample was 15.7 years (with a range from 14 to 20 years) and the median and modal grade level was tenth grade. Utilizing the modified Weinberg criteria for depression by self-report, 440 (13.4%) of the 3,294 students fulfilled criteria for depression. The modified diagnostic criteria by self-report required the presence of the two essential symptoms (dysphoric mood and self-deprecatory ideation) plus at least four of the other eight major symptom categories. For a given criteria symptom to be positive, at least two of the self-report questions relevant to that symptom had to be positive (Table 2). Utilizing the WSAS as a measure for self-report of depression, the number of positive responses (yes answers) on the 51 symptom items can range from 12 to 51. Among the 440 students fulfilling criteria for depression, the mean number of positive responses was 24 (standard deviation, ±5). This is highly consistent with the study by Petti utilizing the BID form of the Weinberg criteria in hospitalized children.

Hispanic females had the highest percentage of depression by self-report—69 (22.4%) of 308—while the lowest group was white males with only 33 (7.9%) of 418.

The long form of the Weinberg Screening Affective Scale (WSAS) contains 55 Yes/No items. Fifty-one of these 56 items relate directly to the Weinberg criteria for depression. Item 54, "I think a lot about killing myself," has been added as a measure of suicidal ideation. This is a symptom of self-deprecatory ideation. Item 55, "My answers are how I have been feeling most of the time," is an important question toward understanding and recognition of depression as a disease process leading to future incapacitation.

Among the criteria for depression by self-report, we have included a "Yes" on question 55:

1. Symptoms I and II must be present, plus four or more of the other 8 categories (III-X)
2. Two (2) positive questions per category
3. "Yes" on question 55
However, the final diagnosis of major depressive disorder or dysthymia in individuals responding to the questionnaire must be determined by appropriate clinical evaluation—a chore that should not be difficult utilizing the established criteria.

For use as a screening instrument, a shorter form would have increased value in school settings and other nonreferred youth populations. Utilizing multiple regression analyses of individual questions to the total scores of the WSAS, it was apparent that 12 questions accounted for 85% of the variance in the total WSAS score (Table 3, items 2 to 13). The scores on the screening form of the WSAS-SF correlate significantly with the scores on the WSAS: $r = .92$, $P = .0001$. Ten percent of the sample scored 7 or greater on the WSAS-SF and 25% scored 5 or above. The WSAS-SF should identify children and adolescents who warrant further evaluation for depression. However, a low screening score does not preclude depression. Based upon our current data in utilizing the WSAS-SF as a screening (but not diagnostic form), we recommend the following:

0–3 Probably no further assessment necessary at this time
4–6 Evaluation by local school personnel
7+ or yes Immediate referral for diagnostic evaluation and treatment

These two forms, WSAS-Long Form (Table 1) and the WSAS-SF (Table 3), allow the clinician to recognize depression more readily in referred children and adolescents failing in school, doing poorly at home, and dropping out of usual activities, and will allow school personnel and others to screen for depression in young people. Furthermore, we trust that potentially suicidal youths can be recognized and the act prevented through the use of these two forms.

Warren A. Weinberg, MD
Graham J. Emslie, MD
University of Texas
Southwestern Medical Center
Children’s Medical Center
Dallas, Texas

Acknowledgments
This work could not have been accomplished without the generous support and contributions from the Caleb C. and Julia W. Dula Educational and Charitable Foundation and from Mr. and Mrs. Woody Hunt and Mr. and Mrs. Morton Meyerson. Appreciation is offered to the several thousand children and adolescent patients of Dr. Warren Weinberg, whose completed the WSAS; and to Dr. Richard Adams, staff, and students who participated in the nonreferred population study. A special thought is offered to Dr. Doman Keele, now deceased, who encouraged the studies toward the development of these forms. This cooperation could not have occurred without the diligent and superb typing of Mrs. Carolyn Rose Harper. The assistance of Mrs. Anne Williams and Mrs. Jeanne Rintelmann as research assistants, has been invaluable.

References

TABLE 3
Weinberg Screening Affective Scale Short Form (WSAS-SF)

<table>
<thead>
<tr>
<th>INSTRUCTIONS: We would like to ask you some serious and very important questions. We want to know how you feel about yourself. If you agree with the statement, circle yes. If you do not agree with the statement, circle no. We consider these questions and your answers very important.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I will try to give my honest feelings on these questions. yes no</td>
</tr>
<tr>
<td>2. I can’t concentrate on my work. (V)* yes no</td>
</tr>
<tr>
<td>3. I feel lonely too much of the time. (I) yes no</td>
</tr>
<tr>
<td>4. I don’t want to go to school anymore. (VII) yes no</td>
</tr>
<tr>
<td>5. It seems like some part of my body always hurts me. (VII) yes no</td>
</tr>
<tr>
<td>6. People are always talking about me when I’m not there. (II) no yes</td>
</tr>
<tr>
<td>7. I have too many bad moods. (I) no yes</td>
</tr>
<tr>
<td>8. I don’t have fun playing with my friends anymore. (VI) no yes</td>
</tr>
<tr>
<td>9. It’s hard to fall asleep and that bothers me. (IV) yes no</td>
</tr>
<tr>
<td>10. I can’t do anything right. (II) yes no</td>
</tr>
<tr>
<td>11. I feel too tired to play. (IX) yes no</td>
</tr>
<tr>
<td>12. I daydream too much in school. (V) yes no</td>
</tr>
<tr>
<td>13. I wish I were dead. (II) yes no</td>
</tr>
<tr>
<td>14. My answers are how I have been feeling most of the time. yes no</td>
</tr>
</tbody>
</table>

*Roman numerals represent the item in relationship to the Weinberg criteria (Table 2).