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EVALUATING FOR ATTENTION DEFICIT-HYPERACTIVITY DISORDER

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Thorough evaluation is central to the education and treatment of the ADHD child. Although much has been written about Attention Deficit-Hyperactivity Disorder, the fact remains that there is no one "test" for this disorder. A team approach is required that involves school staff, parents, physicians, and other clinicians working together. Unfortunately, the literature suggests that too often schoolteachers and evaluators are under-involved in the evaluation process. Although things are improving, we would suggest that school staff talk with families about becoming more involved in the evaluation process.

The teacher's perceptions and observations are particularly important. Keeping in mind that primary features of ADHD (attention, restlessness, impulsivity) appear in all children to varying degrees, we need the teacher's broader classroom perspective. Hopefully, the teacher can help us compare the student's attention span or restlessness with the rest of the class and provide us with a peer-based comparison.

We need also to consider the perceptions and observations of the physical education teacher, music instructor, art teacher, etc. Each class has a different structure, set of expectations, routine, etc. that can tell us a great deal about an ADHD child's strengths and weaknesses.

Gathering teacher's observations and impressions is a complicated process. One attempt to simplify the process uses behavioral questionnaires or rating scales. These instruments ask teachers to rate children's behaviors along a two- or three-point scale. The ratings are then scored along a variety of dimensions, some of which contribute to a diagnostic description of an ADHD child. The questionnaires are usually simple to fill out and take little time. They are important source of information that evaluators should insist upon gathering as part of the evaluation process.

It is important to recognize the limitations of these behavior rating scales. First, the scales do not tell us whether a child is exhibiting the behavioral features of hyperactivity, impulsivity, or inattention for reasons other than true ADHD. Just because a scale "scores" in the ADHD range does not mean the child is clinically hyperactive. Instruments developed specifically for evaluating ADHD children do not offer a sufficiently broad enough perspective to consider other emotional and behavioral issues.

Some scales are being used without consideration as to their validity or reliability or without proper data gathering. Just because a rating scale has been published does not mean that it is an appropriate evaluation tool. Other scales do not consider the developmental changes in behavior as children grow older; they do not provide scoring criteria across age ranges.

The behavioral rating scales do not "speak" for the teacher. They do not tell us how the teacher views the child's behavior in comparison with the rest of his or her class. Nor do they tell us which behaviors are of most concern or most problematic. At our clinic, we ask the teachers to not only rate the frequency or severity of each behavior, but to also indicate which problems are interfering with the child's educational progress and growth. In some instances, we ask the teachers to provide a rating for the class in each category so we can have an idea of the behavioral profile of the whole group. We also ask that each teacher provide written comments as to their concerns and impressions of the student's strengths and weaknesses.

One of the other problems with the use of rating scales is the frequent use of the questionnaires. Teachers who fill out a questionnaire multiple times become familiar with the instrument and may change how they interpret the items. Using the questionnaire repeatedly for the same student can also affect the teacher ratings. Some teachers learn which items are particularly "significant" and may inadvertently bias their ratings to be consistent with their "diagnostic impressions." At this point, there is little research to tell us how these and other issues might affect a teacher's completion of a behavioral questionnaire.

As you can see, behavior rating scales only provide us with teacher impressions based upon the teacher's interpretations of the questionnaire items. The scores we obtain do not necessarily reflect the "truth" and should be interpreted cautiously. Yet, rating scales offer us an inexpensive and efficient means of gathering information across situations and over time. We can also use changes in teacher/parent ratings to judge the effectiveness of interventions and to monitor a student's progress over time.

We would suggest that clinicians consider using the following rating scales as part of their evaluation battery:

1. The Achenbach Child Behavior Checklist is a well standardized, developmentally normed instrument which provides information regarding a wide range of behaviors that help us to understand a child's emotional and behavioral needs. The other rating scales for Attention Deficit-Hyperactivity Disorder should be used in conjunction with the Achenbach Child Behavior Checklist to give a comprehensive picture of a student's behavioral and emotional pattern.
2. The Conners Teacher Rating Scale-Revised is a well-established instrument that has value when used in conjunction with the Achenbach Child Behavior Checklist, particularly when treatment effects are to be measured.
3. The ADHD Rating Scale by Barkley and DePaul uses the formal diagnostic criteria to develop rating scale items. This scale is useful in that it corresponds directly to the diagnostic criteria. Norms are available by age, for both boys and girls.
4. The Revised Home and School Questionnaires by Russell Barkley can provide useful information regarding the child's problems with attention and concentration in a variety of situations (mealtime, car travel, small group activities, etc.).

We have discussed the importance of evaluating the ADHD child's learning strengths and weaknesses. A psychoeducational test battery should include a standardized intelligence test and a well-accepted measure of educational ability. Beware of group tests, since an ADHD child may not do well because of attentional and motivational factors. Beware also of attentional and adjustment factors which may confound the validity of individual testing.

There are a number of standardized intelligence tests, with different tests more appropriate at different ages. Although the Kaufman Assessment Battery for Children can be a useful instrument, particularly in evaluating specific processing and memory scales, memory and attention are important ingredients to success, and the results may underestimate an ADHD child's intellectual ability. The Wechsler Intelligence Scale and Stanford-Binet are perhaps better instruments to use. Other tests, including the Kaufman, Woodcock-Johnson, and Wide Range Assessment of Memory and Learning, are valuable in evaluating specific processing strengths and weaknesses.

Evaluators and teachers should not confuse academic ability with performance. It is one thing to demonstrate knowledge of math facts on a standardized test; it is altogether different to show that same skill in a classroom where there are distractions, competing interests, less supervision, etc. To do a thorough evaluation, we need to consider whether the child can demonstrate the same abilities in the classroom and under what conditions.

It is tempting to rely upon test observations and test performance to make judgments regarding attention span, impulsivity, etc. While some researchers are attempting to use computerized evaluation tools, these currently are more useful in evaluating medication effects than in making a clinical diagnosis. There really is no reliable measure of attention and concentration that an evaluator can use in the testing situation. If a student shows problems with attention and concentration or impulsivity during testing, that is perhaps diagnostic, but there are many children who do well in individualized testing (it is a novel situation, there is more structure, often the tasks are more interesting) but have difficulty in class.

We should always include measures of memory in our evaluation. Please remember that a child's ability to remember number sequences is different than his recall of sentences or information presented in paragraph form. Children with good verbal or auditory memory may have difficulty with visual memory tasks. There are now a variety of tests which allow us to evaluate children's memory abilities and to examine the strategies they use in response to our memory tests.

We should also try to include measures of perceptual and fine motor speed and accuracy (e.g., Coding test from the WISC, the Perceptual Speed Cluster from the Woodcock Johnson, the Beery Developmental Test of Visual Motor Integration, or the Design Copying Tests from the Stanford Binet or WPPSI-R), since ADHD often have troubles with these types of tasks.

While testing can be helpful, there is no replacing a thorough parent and/or teacher interview. While there are some structured interviews which help make sure that we cover the needed developmental and medical history, a productive interview requires that we establish good rapport with the parent or teacher and that we help them to "tell their story." Usually, it is

helpful to review how the child handles specific situations and to ask about the child's style at different ages. One of the common mistakes we have made is to focus too specifically on the question of whether the child has an Attention Deficit-Hyperactivity Disorder and narrow our interview to the point where we are missing other important information. We want to try to get a more global picture of the child and his or her family whenever possible.

Sometimes, there is a request for a differential diagnosis (e.g., "Is this child learning disabled or does he have an Attention Deficit-Hyperactivity Disorder?"; "Is this an emotional problem or ADHD?"). These questions are a great deal like asking if someone is 6 feet tall or 200 pounds. Although one might have a bearing on the other (the taller you are, the heavier you are likely to be), it is possible to be both, and one may have little to do with the other.

A thorough medical evaluation is necessary to rule out neurological, sensory, sleep, drug and alcohol, and other health-related problems that may contribute to ADHD symptoms. Laboratory testing (blood workups, EEG's) are not usually necessary but may be requested by the physician depending upon the history and medical exam findings.

Speech and Language pathologists are very familiar with how auditory and language processing deficits can contribute to attentional difficulties in the classroom, and children should be referred for evaluation if there is a suspicion of such problems.