

ADHD AND PAIN PATIENTS

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Along with anxiety and depression, attention deficit hyperactivity disorder (ADHD) is commonly encountered among pain patients. Overall, ADHD is seen in approximately 4.8% of adults. The incidence is higher among adolescents, but the symptoms disappear over time for some people.

ADHD has become a well-recognized and validated syndrome, known for the havoc it can create in patients' lives. The public is increasingly aware of ADHD, and more of our patients arrive at the clinic with that diagnosis. The DSM-IV criteria for ADHD will be amended in the upcoming DSM-V; the current criteria relate primarily to children and adolescents, and are not entirely applicable to an adult population. Since more patients carry the diagnosis, and are on ADHD medications (primarily stimulants), it is important for pain physicians to be aware of the consequences of the disorder. In addition, it is helpful to be aware of interactions between the ADHD and pain medications.

DIAGNOSIS OF ADHD IN ADULTS

Diagnosis of ADHD utilizes the patient's history, along with corroborating evidence: educational records and history, family or significant other's input, etc. In my experience, most patients who carry the diagnosis of ADHD from childhood have been correctly diagnosed; while there is occasional overdiagnosis of ADHD, underdiagnosis remains more prevalent.

The ADHD criteria listed in DSM-IV, although primarily geared towards children and adolescents, are utilized for adults as well, with modifications. The DSM criteria require that the symptoms have lasted for at least 6 months, and regarding inattention include: 1. Failure to give close attention to details, or make careless mistakes, 2. Difficulty sustaining attention, 3. Not listening, 4. Difficulty following through, 5. Trouble organizing, 6. Avoids tasks that require sustained mental effort, 7. Losing things, 8. Being easily distracted, and 9. Often forgetful in daily activities.

One objective test that we have found useful is the Adult Self-Report Scale, which is an 18 item questionnaire. The first 9 questions relate to attention, the last 9 to hyperactivity. Using the first 9 gives the clinician an easy screen for ADHD, and requires only minutes of time. The attention portion of the Adult Self-Report Scale (ASRS) gives a score of 0 to 36, with 36 being the most severe. This scale or similar ones, along with the clinical and educational history, helps to determine the diagnosis. An important question to ask the patient is, "How difficult is it for you to do boring tasks?" People with ADHD have great difficulty with boring materials. To aid the diagnosis, I often have the patient read books or other materials on adult ADHD, so that they can give better-informed input into the diagnosis.

The three primary features of ADHD (attention, hyperactivity, and impulsivity) do change over time. As patients approach adulthood, hyperactivity often decreases, while impulsivity may cause more problems for adults than in children. Developed primarily for children and adolescents, the DSM-IV criteria present difficulties when applied to adults. ADHD adversely affects adults in their family and work life; these are not addressed by the current criteria. The age of onset, usually listed as before 7 years of age,

may not be accurate when assessing adults, and the adults' recall of the exact age of onset is often inaccurate. In DSM-V, it is possible that the age of onset criterion for adult ADHD may either be dropped, or amended to state that symptoms must have begun by age 15 or so. The current criterion, listing age of onset by 7 years or so, excludes some adults with typical ADHD.

Using hyperactivity as a measure may not be valid in adulthood; many children and adolescents "lose" the "H" (hyperactive) portion of ADHD, and present as the inattentive type. In children, parents' and teachers' input is crucial. In adults, we often utilize the patient's recall for assessment, in addition to asking someone who knows the person well. There are pitfalls in assessing adults; for example, we must not compare the patient to a high-functioning, high IQ peer group, but rather to normal or average people. In addition, particularly in college students, the desire to excel on examinations or improve scores does not qualify them to be diagnosed as ADHD.

Mood disorders may cause an attention/concentration problem in adults, leading to an inappropriate diagnosis of ADHD. However, most patients with ADHD do have associated psychiatric comorbidities, such as anxiety or depression. Many who fit on the bipolar spectrum can have concurrent ADHD. It is important to assess for all of these conditions.

ADHD AND IMPAIRMENT

Adult ADHD patients are often impaired in several categories. They may have done poorly in school, leading to problems with their work and career. Home life is adversely affected, with problems accomplishing daily responsibilities. Relationships are negatively affected by ADHD, and family life often falls apart as a result. The severity of childhood/teen ADHD is an accurate predictor of impairment as an adult. Young children who are constantly restless, and cannot wait their turn in line, for example, often show more impairment as a young adult. ADHD increases the likelihood of driving accidents, and also of drug or alcohol abuse. It is probably not true that ADHD allows one to excel in certain areas; the evidence speaks more for impairment than for any positive outcome for those with ADHD, particularly if it is not treated.

The associated psychiatric comorbidities add to impairment, particularly if they are not treated. These include anxiety, depression, bipolar depression, and substance abuse.

The evidence is strong for treating ADHD. Untreated, vs. treated, ADHD greatly increases the risk, at age 20 to 25, of drug abuse, accidents, joblessness, and jail. The clinical stakes for underrecognizing and undertreating ADHD are enormous. If impulsivity does not improve by the early twenties, it is a poor prognostic indicator for how the patient will do over time.

ADHD AND THE PAIN PATIENT

ADHD complicates the lives of pain patients. The patient struggles with functional impairment due to pain, and ADHD adds to this dysfunction. Education often suffers due to pain; students take longer to complete their degree, and adding ADHD's negative impact can make completion impossible. Family life is adversely affected, as spouses may tire of the burden of pain complaints along with the various ADHD

symptoms. Chronic pain often leads to joblessness, or underperforming at work; ADHD only accentuates this problem. In a chronic pain patient with ADHD and, for instance, anxiety and depression, we commonly encounter a person who is underfunctioning in a number of areas.

ADHD MEDICATIONS

The “first-line” medications for ADHD are the amphetamines (Adderall (generic), Adderall XR(generic, Vyvanse) , and methylphenidate medications (Ritalin(generic),Ritalin LA, Focalin (generic), Focalin XR, Daytrana, and Concerta (generic out soon). The longer acting forms are Adderall XR, Vyvanse, Ritalin LA, Focalin XR, Daytrana and Concerta. Side effects of these include, among others, anxiety, insomnia, tachycardia, and occasionally, increased headache. The stimulants have mild analgesic effects, and in some may be an adjunct for the pain. In addition, some patients with depression find that the stimulants act as an adjunct for the depression, while in others they may actually exacerbate depression. Fatigue is a common comorbidity encountered in pain patients, and stimulants may help the patient’s energy level during the day. In addition, the anorexiatic effects are beneficial for some pain patients, as obesity and weight gain are commonly encountered among pain patients.

The stimulants may improve attention, energy level, pain, depression, and decrease appetite. However, many patients cannot tolerate them due to adverse effects. In addition, pain patients are usually on various medications, with possible interactions. For instance, pain patients often are taking antidepressants, with a resulting tachycardia when combined with stimulants. When pain patients are utilizing daily opioids, adding a stimulant adds another potentially addicting medication. Fortunately, addiction to stimulants among adults with ADHD is uncommon.

When stimulants are not appropriate, or not tolerated, there are various “second-line” medications for ADHD. The alpha-2-adrenergic agonists (Intuniv, Kapvay) are primarily utilized in children and adolescents. Various antidepressants have been successfully used for ADHD. These include the older tricyclics (desipramine, nortriptyline), as well as bupropion. These may be appropriate with concurrent anxiety or depression. Strattera is utilized as a second-line medication for ADHD, and is very similar to the tricyclic desipramine, which also increases norepinephrine. While these antidepressants and Strattera are not as effective as the stimulants, they offer several benefits. These include the advantage of not being addictive, and, when used as once daily medications, they are longer acting,

NON-MEDICATION TREATMENTS

Outside of medications, we often refer patients to psychotherapy. While therapy does not improve attention itself, the patient benefits in a number of ways. These include help with associated anxiety/depression, family life, relationships, organization and worklife. A good therapist, who is acquainted with pain and ADHD, can play a crucial role in improving functioning and quality of life.

It is important to work on sleep issues and diet. In addition, as with almost all patients, we supplement with at least 2000 units of vitamin D. We stress the role of exercise, trying to build up to 20 to 30 minutes daily, on average.

CONCLUSION

ADHD is commonly encountered, seen in 4.8% of adults. The various symptoms complicate the lives of pain patients. The clinical stakes for not recognizing ADHD are enormous; patients often underperform at work, have poor family relationships, and are at increased risk for substance abuse. Treatment with medications, primarily stimulants, improves quality of life and functioning. In addition, psychotherapy plays a role, as does stressing the role of sleep, nutrition, and exercise.

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