

Chiropractic Management of Patients with Learning Disabilities/ADD A Literature Review

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ABSTRACT

For the past several years, learning disabilities, Attention Deficit Hyperactivity Disorder in particular, have been hot topics in the media. The most common treatment for these patients has been to prescribe a regimen of the highly controversial drug, Ritalin. The tragedy of this situation is that many of these patients have been misdiagnosed, often by the patient's teacher, not a qualified physician. Thus, these patients are taking medication for society's convenience, rather than to abate an organic condition. Current research has shown that many of these patients are actually suffering from emotional stress and/or food allergies.

As Chiropractors, we will have the opportunity to see many of these patients in our office. It is, therefore, necessary that we have a general understanding of learning disabilities, how to recognize an individual with learning disabilities and offer advice on preventative measures. It is my intention to review the current medical and chiropractic literature on learning disabilities, their diagnosis, management and prevention; and produce a concise guide for Chiropractors to use in their office.

Key Indexing Terms: Learning Disabilities; ADHD; Chiropractic; Pediatrics

INTRODUCTION

Attention deficit disorder (ADD) is the childhood disease of the 1990's as it ranks as America's #1 childhood psychiatric disorder^{1,5,10}. The treatment and management of this disorder are of great importance to health care physicians, as millions of children are diagnosed with the disorder. Among these health care physicians are chiropractors, which stand to offer a unique, drugless approach to this affliction. This paper will attempt to show the importance of chiropractic intervention and management of children with attention deficit disorder. Points that will be covered are how to diagnose ADD, the effects of dietary management, the role of environmental stresses, side-effects of common medications used for ADD, and what to look for during a chiropractic examination of a patient with ADD.

REVIEW OF THE LITERATURE

Diagnosis of ADD

Since millions of children are diagnosed with ADD, and most of these children are on medications that are potentially dangerous, we must be concerned that we are properly diagnosing these children. A terrible thought, and too often a reality, is that a child is misdiagnosed with ADD and put on a drug that has harmful side-effects. To ensure that misdiagnosis is not a common occurrence, we must have an in-depth investigation and examination of the patient at hand. We must not be too quick to come to the diagnosis of ADD just because a child is not doing well in school or the child seems to be more active

than other children. We must take all factors in this child's life into consideration before we come to any conclusions.

Diagnosis of ADD may seem simple. Patient presents with inattentiveness, hyperactivity, bad grades in school, sleep disturbances and so forth⁶. As stated before, we must not be so quick to make a diagnosis. Brian Abelson, D.C., states that physicians use the guidelines outlined in the DSM IV on Attention Deficit Hyperactivity Disorder (ADHD). For the complete list of guidelines I would refer you to his article in the Canadian Chiropractor or look in the DSM IV¹. These guidelines are very thorough and take into consideration most of the presenting traits of ADD. You must consider all of these traits before you reach your diagnosis. Some doctors will diagnose a child with ADD by only talking to the parents and not evaluating the child. Examination of the child is probably the most important part in the diagnosis. Some differential diagnoses to keep in mind are normal exuberant behavior of childhood, mental retardation, severe emotional disturbance, vision deficiencies or hearing deficit, hyperthyroidism, lead intoxication, hypoglycemia, and neurologic disorders³.

Dietary Management

The late Larry Webster, D.C. stated that dietary control was important in a child with ADD because so many foods have an irritating effect on the nervous system¹¹. A British study on hyperkinetic behavior showed 116 of 185 children responded positively to dietary changes. Children in the study were put on a low allergy diet consisting of water, chicken, lamb, rice, potatoes, bananas, pears, cabbage, cauliflower, broccoli, cucumber, celery, and carrots⁷. Contrary to

popular belief, sugar has not been proven to be a cause of ADD¹². So instead of eliminating sugar from the diet, you should eliminate foods that contain allergens such as milk containing products, gluten, citrus fruits, nuts, seafood, eggs, artificial sweeteners, caffeine, table sugar, and hydrogenated oils^{1,8,9}. Although there are varied opinions about the role of a child's diet in the management of ADD, the research is starting to show that there is some credibility to the claim that diet does have an effect on children with ADD.

Environmental Factors

Environmental factors are sometimes overlooked as an etiology of ADD. They should be considered just as important as any other factors. An association between learning disorders and elevated levels of selenium, aluminum, cadmium, and lead has been noted^{2,3}. With this in mind you may want to do a trace mineral analysis on the patient. Genetics are also being researched as a possible etiology of ADD. Although we cannot control our genetics we can control things such as smoking and drinking when pregnant, which have been associated with ADD^{2,3}. Other environmental factors that may precipitate the onset of ADD include, but are not limited to, birth trauma, vaccinations, physical and sexual abuse, or an emotionally disturbing event. All of these things should be considered and asked about in the consultation and history of the patient.

Medications for ADD

Probably the most controversial drug on the market today is the one that is most commonly used to treat ADD. This drug is methylphenidate (Ritalin). This drug is controversial because of the rate at which it has been prescribed and the many side effects that come with taking the drug. Other drugs that are prescribed, but not as commonly as Ritalin, are Tofranil and Norpramin. These drugs are prescribed to help the child focus, be more attentive, and suppress their activity level. The major side effects of these drugs are growth inhibition, anorexia, insomnia, nervousness, and dysphoria³. The side effects of these drugs are what makes it important to correctly diagnose ADD and properly administer the drugs only when needed. Also with these kinds of side effects it may be wise for the parents to try a different approach to helping this condition such as chiropractic which can provide a drugless alternative.

Chiropractic Examination

In the chiropractic literature the treatment of ADD comes mostly from a dietary and neurologic approach. The treatment from a dietary standpoint is outlined above. From a neurologic approach there are many factors stated to be the cause of neurological imbalance in the body. Environmental factors as discussed above have a direct affect on the nervous system. One factor that hasn't been discussed is the subluxation of the vertebral column. Subluxations of the vertebral column can also cause an imbalance in the nervous system by affecting the spinal cord and its nerve roots. Jennifer Peet has stated that this neurologic imbalance causes a break down in communication between the brain

and the body leading to abnormal behavior, decreased concentration and general agitation⁷. These subluxations may be a result of physical trauma such as birth, abuse, or just falling as a child. They can also be caused by chemical imbalances from a poor diet, vaccinations, allergens, or pollutants. Subluxations may also be a result of mental stress such as a troubling home life, pressure from schoolteachers, or an emotionally disturbing event. This is where chiropractic comes in as a unique alternative. Chiropractors are the only professionals specifically trained in the detection and correction of vertebral subluxations.

The chiropractic exam should start with a thorough history and consultation with both the child and the parents. A physical exam should be performed to rule out any disorders such as poor eyesight, hearing deficits, or neurologic problems which have all been associated with ADD^{1,3}. A complete orthopedic and neurologic exam should then be done. X-rays can be done at the doctor's discretion. Some doctors have noted anterior translation of the head, and atlas subluxation on x-ray of the ADD patient⁷. Motion and static palpation should be performed in helping to determine subluxations of the spine (if any exist). Some doctors have noted occiput subluxations, as well as atlas and axis subluxations. Their explanation for these findings is the trauma that is experienced at birth when the head of the baby is pulled in order to hasten the delivery. There has not been one adjusting technique indicated in the literature that is better than the others at helping patients with ADD. The main focus seems to be balancing the nervous system by eliminating mental, physical, and

chemical stresses on the body. The chiropractic holistic approach is to adjust the diet and remove the vertebral subluxations.

More research is needed on the effects of chiropractic management of ADD. Most of the chiropractic literature consists only of case studies. There is only one peer reviewed paper on chiropractic and ADD. In this paper, 4 of 7 subjects showed improvement of their ADD symptoms through chiropractic care⁴. This study should prove that there is an identifiable relationship between ADD improvements and chiropractic care and more studies should be done on this subject.

CONCLUSION

Learning disabilities should be of major concern to health care physicians. As physicians we should take on the responsibility to give every child the opportunity to live a normal childhood. As chiropractors we should give them this opportunity without the dangerous side effects of drugs. We must be able to properly recognize and diagnose Learning disabilities to minimize, or possibly prevent, the use of drugs, such as Ritalin.

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