Occurrence and Treatment of ADHD in Adults

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The original therapeutic, open-label, treatment trial reported by Surman et al. in this issue investigated only adults with late onset ADHD [1]. The report is important for several reasons. First, the drug was found to be extremely effective, which provides another option for treatment of ADHD in adults apart from Dextroamphetamines, such as Adderall (mixed amphetamine salts), Vyvanse (lisdexamphetamine dimesylate), and similar sympathomimetic drugs. For many years, neurologists, pediatricians, and psychiatrists considered attention deficit disorder a disorder of childhood, not of adults. For example, in Goodman and Gilman's textbook, "The Pharmacological Basis of Therapeutics," they make an excellent summary of the symptoms of attention deficit disorder (hyperkinetic syndrome) discussing the 5% of U.S. children with ADHD, without mentioning, in 1985, that adults also suffer from this disorder [2]. This author has treated the condition for 50 years so that eventually it became apparent to him that many children diagnosed in school or kindergarten with ADD and hyperactivity associated with decreased concentration causing poor school performance, showed improvement when the diagnosis was made and treatment was instituted with amphetamines. Many such children as they grew up to adulthood continued to have mild symptoms of the disorder, which benefited by continuing amphetamine therapy.

A second important consideration, emphasized by this paper, is that it has become apparent recently that the condition can be diagnosed in adults after the age of 20. Many neurologists now have diagnosed and treated

numerous adult patients with the disorder. Most represent cases in which symptoms of impaired concentration and attention were first recognized after the age of 20, similar to patients recruited in this reported study from the Massachusetts General Hospital. Rarely, one sees the symptoms appear in association with other neurological disorders. Three such adults have been treated in this neurology clinic. One was diagnosed with Parkinson's disease, a second with mild mental retardation due to neonatal brain injury, and a third is a businessman in his seventies with status post-beta streptococcus meningitis complicated by cerebral dural venous thrombosis whose ADHD symptoms appeared a year later. All three responded to treatment with amphetamines.

Among other adult patients diagnosed in our clinic are two physicians with ADD symptoms and an interesting family of patients with strong family history of ADD including a father plus four of his adult offspring, suggesting that genetics may play a part as a risk factor for ADD. Recent reports show that adults with ADHD are two times more likely to report being involved in three or more car crashes [3].

Adult neurologists now agree that ADHD occurs in adults as scientifically proven by this study [1], reporting their open-label prospective study of only adults treated with atomoxetine hydrochloride (also known as ATX). They established benefit by using a reliable scoring system, which confirmed clinical improvement among adults with ADHD who improved their concentration and mental focusing during problem solving, at work, without distraction. An average daily dose of

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ATX 78.7 mg/day was prescribed. This dose was associated with statistically highly significant improvement of ADHD symptoms.

This study provides positive confirmation that ADD occurs in adults as well as children, and responds to ATX treatment similar to that seen in children treated for ADHD using currently available dextra-amphetamines. Elsewhere, scientific evidence suggests that ADHD is caused by a neurotransmitter disorder in the brain where either norepinephrine is lacking or the balance between norepinephrine and serotonin is at fault. Neurotransmitter pathways involved appear to be in the cerebral frontal lobes including caudate nucleus and reticular formation.

References

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