

Extra, extra read all about it!

Etiology

Maternal Stress during Pregnancy, ADHD Symptomatology in Children and Genotype: Gene-Environment Interaction.

Grizenko N, Fortier ME, Zadorozny C, Thakur G,
Schmitz N, Duval R, Jobber R.

J Can Acad Child Adolesc Psychiatry. 2012 Feb;21(1): 9-
15.

OBJECTIVE

Case control studies suggest a relationship between maternal stress during pregnancy and childhood ADHD. However, maternal smoking, parenting style and parental psychiatric disorder are possible confounding factors. Our objective was to control for these factors by using an intrafamilial design, and investigate gene-environment interactions.

CONCLUSIONS

Maternal stress during pregnancy was associated with the development of ADHD symptomatology after controlling for family history of ADHD and other environmental factors. This association could partly be mediated through the DRD4 genotype.

ADHD-LIKE SYMPTOMS AND ATTACHMENT IN INTERNATIONALLY ADOPTED CHILDREN

Abrines N, Barcons N, Marre D, Brun C, Fornieles A, Fumadó V.

Attach Hum Dev. 2012 Jul; 14(4): 405-23.

OBJECTIVE

The aims of the study was to explore the existence of ADHD-like symptoms and/or diagnosis in a sample of internationally adopted children depending on their country of origin and to describe the links that may exist between the display of these symptoms and observed narrative-based attachment patterns.

FINDINGS

A Catalan example of 58 adopted children aged 7-8 years were assessed:

Eastern Europe - 24

China - 23

Ethiopia – 11

FINDINGS:

1. Children adopted from Eastern Europe showed a trend toward more hyperactivity and significantly more attention problems than girls adopted from China.
2. Children with secure attachment showed significantly less attention problems and a trend toward less hyperactivity.

Iron and ADHD: Time to Move Beyond Serum Ferritin Levels

De Donfrancesco, R., Parisi, P., Vanacore, N., Martines,
F., Sargentini, V., Cortese, S.

Journal of Attention Disorders January 30, 2012
1087054711430712

Iron and ADHD: Objectives

1. To compare serum ferritin levels in a sample of stimulant-naïve children with ADHD and matched controls
2. To assess the association of serum ferritin levels to ADHD symptomatology subtypes and IQ

Iron and ADHD: Conclusion

The findings of this study do not support a significant relationship between serum ferritin levels and ADHD and IQ

The association of ADHD and lead levels among children less than 10 years old referred to Teheran hospitals between 2007 and 2010

Daroggar Sepideh, Davari Rozita, Kamran
Lalbahsh Ali

AIM

This study aimed to compare blood lead levels of children with ADHD and normal children.

CONCLUSION

BLL was higher in ADHD children, but not proven to be significantly higher.

ANALYSIS OF HEAVY METALS IN THE HAIR OF CHILDREN WITH ATTENTION-DEFICIT HYPERACTIVITY DISORDER AND TOURETTE'S SYNDROME

Cho SY, Ock SM, Lee MH, Kang MH, Kim CE, Bae JN, Lee JS

J Korean Acad Child Adolesc Psychiatry. 2012 Jun; 23(2): 63-68

CONCLUSION

We confirmed that lead exposure is a risk factor for ADHD.

We also identified that cadmium may be a new candidate risk factor for manifestation of ADHD

We did not find an association between heavy metals and manifestation of TS

The Frequency of Celiac Disease in Attention-Deficit Hyperactivity Disorder.

Güngör S, Celiloglu OS, Ozcan OO, Raif SG, Selimoglu
MA.

OBJECTIVE

Although it is well known that celiac disease (CD) is associated with neurologic disorders, association with psychiatric problems is not well-defined. In this report, we aimed to detect CD prevalence in patients with attention-deficit and hyperactivity disorder (ADHD).

CONCLUSIONS

The seropositivity rates for CD were found similar in ADHD and control groups. Thus, neither routine screening for CD nor empirical recommendation of gluten-free diet seems necessary in children with ADHD.

Antibasal Ganglia Antibodies and Antistreptolysin O in Noncomorbid ADHD

De Maddalena, T., Francesco, M., Marta, S., Francesco,
C., Giuseppina, P.M., Silvio, T., Lucia, M.

Journal of Attention Disorders September 5, 2012
1087054712455505

OBJECTIVE

To evaluate the streptococcal infection frequency, defined as serum antistreptolysin O (ASO), and frequency of serum ABGA positivity in a sample of patients with nc-ADHD. (40)

CONCLUSION

These data suggest that streptococcal infections and autoimmune reactions against the basal ganglia are more frequent in ADHD patients.

Diagnosis

Screening for attention-deficit/ hyperactivity disorder (ADHD): can high-risk children be identified in first grade?

Holmberg K, Sundelin C, Hjern A.

Child Care Health Dev. 2012 Apr. 20. doi: 10.

AIM

To assess different thresholds for screening with the Conners Scale for hyperactive-inattentive behaviours in first grade for ADHD in grade four.

CONCLUSIONS

The study indicates a strong association between a teacher's report of a score ≥ 10 on the Conners scale in first grade and pervasive ADHD in grade four, while parental reports were less predictive.

Can computerized cognitive tests assist in the clinical diagnosis of attention-deficit hyperactivity disorder?

Bloch Y, Fixman M, Maoz H, Bloch AM, Levkovitz Y, Ratzoni G, Aviram S, Gal G.

J Neuropsychiatry Clin Neurosci. 2012 Dec 1:24(1): 111-4.

ABSTRACT

A group of 34 children and adolescents suspected of having attention-deficit hyperactivity disorder were referred for a computerized evaluation that included sustained attention, working memory, planning, and set-shifting. Although only sustained attention had reasonable specificity, all tests had questionable contribution to the diagnostic evaluation.

Diagnostic Value of Resting Electroencephalogram in Attention

Deficit/Hyperactivity Disorder Across the Lifespan.

Liechti MD, Valko L, Müller UC, Döhnert M,
Drechsler R, Steinhausen HC, Brandeis D.

Brain Topogr.2012 Oct 9. [Epub ahead of print]

The resting EEG reflects development and arousal, but whether it can support clinical diagnosis of ADHD remains controversial.

Purpose: To examine whether theta power and theta/beta ratios are consistently elevated in ADHD and younger age as proposed.

FINDINGS

The lack of consistent spectral resting EEG abnormalities in ADHD despite consistent development effects casts doubt upon conventional neurometric approaches towards EEG-based ADHD diagnosis, but is consistent with evidence that ADHD is a heterogeneous disorder, where the resting state is not consistently characterized by

Is there a correlation between ADHD symptom expression between parents and children?

Macek J, Gosar D, Tomori M.

Neuro Endocrinol Lett. 2012 Apr 23;33(2): 201-206. [Epub ahead of print]

A significant correlation was found between children and paternal current ADHD symptomatology, but not confirmed for mothers.

Influence of relative age on diagnosis and treatment of attention- deficit/hyperactivity disorder in children

Morrow RI., Garland J, Wright JM, Maclure M, Taylor S,
Dormuth CR.

CMAJ. 2012 Mar 5. [Epub ahead of print]

<http://www.cmaj.ca/content/early/2012/03/05/cmaj.111619.full.pdf>

BACKGROUND

The annual cut-off date of birth for entry to school in British Columbia, Canada, is December 31. Thus, children born in December are typically the youngest in their grade. We sought to determine the influence of relative age within a grade on the diagnosis and pharmacologic treatment of attention-deficit/hyperactivity disorder (ADHD) in children.

FINDINGS

Boys who were born in December were 30% more likely to receive a diagnosis of ADHD than boys born in January. Girls born in December were 70% more likely to receive a diagnosis of ADHD. Boys were 41% more likely and girls 77% more likely to be given a prescription for ADHD medication if they were born in December.

ADHD Predominantly Inattentive Subtype With High Sluggish Cognitive Tempo: A New Clinical Entity?

De Capdevilla-Brophy, C., Artigas-Pallares, J.,
NavarroPastor, J.B., Garcia-Nonell, K., Rigau-Ratera, E.,
Obiols, J.E.

Journal of Attention Disorders May 31, 2012
1087054712445483

OBJECTIVE

The authors investigated differences in the neuropsychological and behavioural profiles of two groups of children with ADHD, one with predominantly inattentive subtype of ADHD (PI) and high sluggish cognitive tempo (SCT; $n = 19$) and another formed by the rest of the sample (children with ADHD combined subtype and children with PI and low SCT scores; $n = 68$).

CONCLUSION

This study supports revising subtype's criteria and further studying the hypothesis that ADHD with high SCT constitutes a separate clinical entity.

Factor Structure of a Sluggish Cognitive Tempo Scale in Clinically- Referred Children.

Jacobson LA, Murphy-Bowman SC, Pritchard AE, Tart-
Zelvin A, Zabel TA, Mahone EM.

J Abnorm Child Psychol. 2012 May 8. [Epub ahead of
print]

Factor Structure of a Sluggish Cognitive Tempo Scale in Clinically-Referred Children.

“Sluggish cognitive tempo” (SCT) is a construct hypothesized to describe a constellation of behaviors that includes daydreaming, lethargy, difficulty sustaining attention, and underactivity.

PREVALENCE

Attention deficit hyperactivity
symptoms and disorder (ADHD)
among African children: a review of
epidemiology and co-morbidities :
original

M.O. Bakare

OBJECTIVE

To review literature from Africa on the epidemiology of ADHD as well attention deficit hyperactivity symptoms and associated co-morbid conditions among African children. (9)

RESULTS

The prevalence of ADHD varied with rates of between 5.4% and 8.7% amongst school children, 1,5% amongst children from the general population, between 45,5% to 100.0% amongst special populations of children with possible organic brain pathology. Common associated co-morbid conditions were oppositional defiant disorder, conduct disorder as well as anxiety/depressive symptoms.

Co-morbidity

Assessment of growth in
pharmacological treatment-naïve
Polish boys with attention-
deficit/hyperactivity disorder.

Hanć T, Cieślik J, Wolańczyk T, Gajdzik M.

OBJECTIVE

The objective of this study was to estimate the growth of pharmacological treatment-naïve Polish boys with attention-deficit/hyperactivity disorder (ADHD). (n=135)

RESULTS

1. There were no statistically significant differences between mean body height of boys with ADHD and standards of growth of Polish children.
2. Mean body weight ($z=0.28$) and BMI ($z=0.25$) in the total cohort were statistically higher than the norm.

Final height in patients with Attention Deficit Disorder with Hyperactivity (ADHD) treated with methylphenidate

Rev Esp Endocrinol Pediatr 2012; 1:47-51 Doi. 10.3266

OBJECTIVES

To examine whether the final height of patients with ADHD and treated with methylphenidate is shorter than their target.

CONCLUSIONS

Treatment with methylphenidate in ADHD does not seem to negatively affect growth in relation with genetic height.

Prevalence of Epilepsy and Attention-Deficit Hyperactivity (ADHD) Disorder: A Population-Based Study.

Cohen R, Senecky Y, Shuper A, Inbar D, Chodick G, Shalev V, Raz R.

J Child Neurol. 2012 May 1. [Epub ahead of print]

Children with ADHD had almost twice the risk of epilepsy than children without ADHD (12.6%)

PREVALENCE OF ADHD SYMPTOMS IN PATIENTS WITH CONGENITAL HEART DISEASE

Hansen E, Poole TA, Nguyen V, Lerner M, Wigal T,
Shannon K, Wigal SB, Batra AS

Pediatr Int. 2012 Aug 13. doi: 10.1111/j.1442-
200X.2012.03711.x. [Epub ahead of print]

OBECTIVE

The presence of Attention Deficit Hyperactivity Disorder (ADHD) symptoms in children with Congenital Heart Disease (CHD) was investigated

CONCLUSION

ADHD symptoms are more prevalent in children with CHD. Parent ratings of inattention and hyperactivity symptoms in CHD patients are similar to ratings in children diagnosed with ADHD. There is a trend towards a greater prevalence of inattentive symptoms in patients with cyanosis or single ventricle physiology

Is ADHD a Risk Factor Independent of Conduct Disorder for Illicit Substance Use? A Meta-Analysis and Metaregression Investigation.

Serra-Pinheiro MA, Coutinho ES, Souza IS, Pinna C, Fortes D, Araújo C, Szobot CM, Rohde LA, Mattos P.

J Atten Disord. 2012 Feb 17. [Epub ahead of print]

OBJECTIVE

To investigate meta-analytically if the association between ADHD and illicit substance use (ISU) is maintained when controlling for conduct disorder / oppositional-defiant disorder (CD/ODD).

CONCLUSION

The existing data do not indicate that ADHD increases the risk of ISU beyond the effects of CD/ODD. However, the combination of all existing data is limited in power to detect a small increase in chance.

Tureck K, Matson JL, May A, Turygin N

Compare rates of externalizing in children with autism spectrum disorder (ASD) and attention deficit/hyperactivity disorder (ADHD) symptoms to children with ADHD.

Conclusions: ASD exacerbates the existing symptoms of ADHD during childhood.

Anxiety in College Students With ADHD: Relationship to Cognitive Functioning

DE Prevatt, F., Dehili, V., Taylor, N., Marshall, D.

Journal of Attention Disorders August 28, 2012

1087054712457037

OBJECTIVE

This study sought to explore how anxiety impacts college students with ADHD, especially with regard to cognitive functioning.

CONCLUSIONS

Anxiety in college students with ADHD can take many forms, and interventions require a multi-focused approach. There may be some positive aspects to anxiety.

Treatment - medical

The genetic toxicity of methylphenidate: a review of the current literature.

Morris SM, Petibone DM, Lin WJ, Chen JJ, Vitiello B, Witt KL, Mattison DR.

J Appl Toxicol. 2012 Feb 15. doi: 10.1002/jat.2721.
[Epub ahead of print]

The genetic toxicity of methylphenidate: a review of the current literature.

A publication in 2005 reported significant increases in cryptogenetic damage in the lymphocytes of methylphenidate-treated pediatric patients

Neither the laboratory animal or human subject studies found an increase in any of the measures of genetic damage that were evaluated.

Modulation of Attention- Deficit/Hyperactivity Disorder Symptoms by Short- and Long-Acting Methylphenidate Over the Course of a Day

Thomas Günther, Berrak Kahraman-Lanzerath, Eva Lotte Knospe, Beate Herpertz-Dahlmann, and Kerstin Konrad.

Journal of Child and Adolescent Psychopharmacology:
Published ahead of print

OBJECTIVE

To investigate whether a long-acting methylphenidate (MPH-ret) is as effective as two doses of immediate release methylphenidate (MPH-IR) in reducing ADHD symptoms during the course of the day

FINDINGS

The MPH-ret and MPH-IR groups had comparable treatment effects on measures of hyperactivity and inattention and normalized participant performance to control levels. In contrast MPH-IR seems to have an advantage over MPH-ret in impulsivity treatments.

Methylphenidate-induced erections in a prepubertal child.

Kelly BD, Landon DJ, McGuinness D, Brady CM

J Pediatr. Urol. 2012 Apr. 30. [Epub ahead of print]

Despite priapism being a rare adverse reaction associated with MPH, physicians and parents need to be aware.

Does Comorbid Disruptive behaviour Modify the Effects of Atomoxetine on ADHD Symptoms as Measured by a Continuous Performance Test and a Motion Tracking Device?

De Wehmeier, P.M., Kipp, L., Banaschewski, T.,
Dittmann, R.W., Schacht, A.

Journal of Attention Disorders August 28, 2012

OBJECTIVE

To compare the reduction of ADHD symptoms under Atomoxetine patients with and without comorbid ODD or CD

CONCLUSION

Atomoxetine reduced ADHD severity regardless of whether comorbid ODD/CD was present. The treatment effect of atomoxetine on hyperactivity appears to be more pronounced in the subgroup of patients with comorbid ODD/CD than in the subgroup without this comorbidity.

A Randomized Double-Blind Study of Atomoxetine Versus Placebo for Attention-Deficit/Hyperactivity Disorder Symptoms in Children With Autism Spectrum Disorder

De Myriam Harfterkamp, Gigi van de Loo-Neus, Ruud B. Minderaa, Ruther-Jan van der Gaag, Rodrigo Escobat, Alexander Schacht, Sireesha Pamulapati, Jan K. Buitelaar, Pieter J. Hoekstra

Journal of the American Academy of Child & Adolescent Psychiatry, 28 May 2012

OBJECTIVE

The efficacy of atomoxetine as treatment of symptoms of attention-deficit/hyperactivity disorder (ADHD) in patients with autism spectrum disorder (ASD) has not been established.

CONCLUSIONS

Atomoxetine moderately improved ADHD symptoms in patients with ASD and was generally well tolerated. Adverse events in this study were similar to those in other studies with ADHD patients without ASD.

Efficacy of Atomoxetine for the Treatment of ADHD Symptoms in Patients With Pervasive Developmental Disorders: A Prospective, Open-Label Study

De Fernandez-Jaen, A., Fernandez-Mayoralas, D.M., Calleja-Perez, B., Munoz-Jaereno, N., Campos Diaz, M.d.R., Lopez-Arribas, S.

Journal of Attention Disorders February 23, 2012

1087054711423626

OBJECTIVE

Atomoxetine's tolerance and efficacy were studied in 24 patients with pervasive developmental disorder and symptoms of ADHD.

CONCLUSION

Atomoxetine appears to be a useful drug.

Atomoxetine for Treating ADHD Symptoms in Autism: A Systematic Review

De Ghanizadeh, A.

Journal of Attention Disorders April 27, 2012

1087054712443154

OBJECTIVE

This study systematically reviews the current literature on the administration of atomoxetine for treating children and adolescent with comorbidity on autism spectrum disorder (ASD) and ADHD.

CONCLUSION

There are not enough controlled clinical trials for showing the efficacy of atomoxetine for treatment of ADHD symptoms in autism. Although evidence suggests potential efficacy of atomoxetine, the current evidences are not conclusive.

Persistence of Stimulants in Children and Adolescents with Attention-Deficit/ Hyperactivity Disorder.

Palli SR, Kamble PS, Chen H, Aparasu RR.

J Child Adolesc Psychopharmacol. 2012 Feb 24. [Epub ahead of print]

OBJECTIVE

To examine the persistence of three newly initiated stimulant preparations among Medicaid children and adolescents with attention-deficit/hyperactivity disorder (ADHD) diagnosis.

CONCLUSIONS

Long acting stimulants had comparatively longer persistence than other stimulants.

Methylphenidate in Children with ADHD With or Without Learning Disability

De Williamson, D., Murray, D.W., Damaraju, C.V.,
Ascher, S., Starr, H.L.

Journal of Attention Disorders May 24, 2012
1087054712443411

OBJECTIVE

To explore treatment response to Osmotic Release Oral System® (OROS) methylphenidate in children with ADHD with and without comorbid learning disability (LD).

CONCLUSION

In children with ADHD with or without comorbid LD, behavior and performance improved during treatment with OROS methylphenidate.

Does Long-Term Medication Use Improve the Academic Outcomes of Youth with Attention-Deficit/Hyperactivity Disorder?

Langberg JM, Becker SP.

Clin Child Fam Psychol Rev. 2012 Jun 8. [Epub ahead of print]

Commentary

- Medication is the most commonly used treatment for youths with ADHD, and it is essential to understand the extent to which medication use improves long-term academic functioning.
- Studies demonstrate that long-term medication use is associated with improvements in standardized achievement scores.
- The magnitude of these improvements is small and the clinical or educational significance is questionable
- Evidence for long-term improvements in school grades and grade retention is less compelling.

A POPULATION-BASED STUDY OF STIMULANT DRUG TREATMENT OF ADHD AND ACADEMIC PROGRESS IN CHILDREN

Zoëga H, Rothman KJ, Huybrechts KF, Olafsson O,
Baldursson G, Almarsdóttir AB, Jónsdóttir S, Halldórsson M,
Hernández-Díaz S, Valdimarsdóttir UA

Pediatrics. 2012 Jun25. [Epub ahead of print]

OBJECTIVE

We evaluated the hypothesis that later start of stimulant treatment of attention-deficit / hyperactivity disorder adversely affects academic progress in mathematics and language arts among 9- to 12-year-old children

CONCLUSIONS

Later start of stimulant drug treatment of attention-deficit / Hyperactivity disorder is associated with academic decline in mathematics

Stimulants to enhance academic achievement.

Stein MT.

J Dev Behav Pediatr.2012 Sep; 33(7): 589.

Stimulants to enhance academic achievement.

1. In a survey from a large urban community, a significant number of students in elite middle schools and high schools report using stimulants as grade enhancers
2. Falsifying symptoms of ADHD at the time of a doctor visit is a frequently used method to obtain a prescription for a stimulant.
3. There is a role for paediatricians to prevent this abuse of medication.

Anxiety and methylphenidate in attention deficit hyperactivity disorder: a double-blind placebo-drug trial

Keren Moshe, Avi Karni and Emanuel Tirosh

ADHD ATTENTION DEFICIT AND HYPERACTIVITY DISORDERS 2012, DOI: 10:1007/s12402-012-0078-2

The higher the level of anxiety the lower e response to MPH.

Does a normalizing
electroencephalogram in benign
childhood epilepsy with
centrotemporal spikes abort attention
deficit hyperactivity disorder?

Schneebaum-Sender N, Goldberg-Stern H, Fattal-
Valevski A, Kramer U.

Pediatr Neurol. 2012 Oct;47 (4):279-283

OBJECTIVE

Retrospective study of the efficacy of antiepileptic drugs in preventing the need for methylphenidate in patients with benign epilepsy with centrotemporal spikes and ADHD

RESULTS

Improvement in attention was either temporary or not significant enough to discontinue methylphenidate. Methylphenidate was eventually prescribed to all patients.

Guanfacine ER for the treatment of adolescent attention-deficit/ hyperactivity disorder.

Bukstein OG, Head J.

Expert Opin Pharmacother. 2012 Sept 7. [Epub ahead of print]

INTRODUCTION

Guanfacine extended release (GXR) is an alpha 1A noradrenergic agonist that has been approved by the FDA for the treatment of Attention-Deficit/Hyperactivity Disorder (ADHD) as a monotherapy, and as an adjunctive therapy to stimulation for the treatment of ADHD in children and adolescents age 6 – 17.

EXPERT OPINION

Due to the absence of positive evidence for the efficacy of GXR for monotherapy in adolescents, clinicians should be guarded in the use of GXR for monotherapy in adolescents with ADHD. The use of GXR has considerable promise as an adjunct to stimulants for other behavioral conditions associated with ADHD.

Improving Visual Memory, Attention, and School Function with Atomoxetine in Boys with Attention- Deficit/hyperactivity Disorder

Chi-Yung Shang and Susan Shur-Fen Gau.

Journal of Child and Adolescent Psychopharmacology.
October 2012, 22(5): 353-363. doi:

CONCLUSION

Our findings suggested that atomoxetine was associated with significant improvement in visual memory, attention, and school functioning in boys with ADHD in Taiwan.

Sweat testing for the detection for atomoxetine from paediatric patients with attention deficit/hyperactivity disorder: application to clinical practice.

Emilia Marchei, Esther Papaseit, Oscar Gargia-Algar, Amaia Bilbao, Magí Farré, Roberta Pacifici and Simona Pichini

Drug Testing and Analysis 2012 (4) Published on line

Sweat testing for the detection for atomoxetine from paediatric patients with ADHD

Measuring ATX in sweat patches can provide information on cumulative drug use from patch application until removal

Treatment – non-medical

Emerging Support for a Role of Exercise in Attention-Deficit/ Hyperactivity Disorder Intervention planning.

Berwid OG, Halperin JM.

Review article: Evidence for direct impact
of exercise on neural functioning

Preliminary evidence that exercise may
have positive effects on children with
ADHD

Exercise Improves Behavioral, Neurocognitive, and Scholastic Performance in Children with Attention-Deficit/ Hyper-activity Disorder

Matthew B. Pontifex, PhD, Brian J. Saliba, BS, Lauren B. Raine, BS, Daniel L. Picchietti, MD, and Charles H. Hillman, PhD

J Pediatr.2012 Oct 17. pii: S0022-3476(12)00994-8.doi: 10.1016/j.jpeds.2012.08.036. [Epub ahead of print].

CONCLUSION

These findings indicate that single bouts of moderately intense aerobic exercise may have positive implications for aspects of neurocognitive function and inhibitory control in children with ADHD.

Effect of Acute Exercise on Executive Function in Children with Attention Deficit Hyperactivity Disorder

Yu-Kai Chang, Suyen Liu, Hui-Hsiang Yu and Yuan-Hung Lee

Arch Clin Neuropsychol (2012)

OBJECTIVE

To determine the effect of acute aerobic exercise on executive function in children with ADHD

FINDINGS

Exercise had a promising effect. Postulate: Exercise allocates attention resources, influences the dorsilateral prefrontal cortex and is implicated in exercise-induced dopamine release.

Findings are promising – further studies.

POLYUNSATURATED FATTY ACIDS (PUFA) FOR ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) IN CHILDREN AND ADOLESCENTS

Gillies D, Sinn JK, Lad SS, Leach MJ, Ross MJ

Cochrane Database Syst Rev. 2012 Jul 11; 7: CD007986

CONCLUSIONS

Overall, there is little evidence that PUFA supplementation provides any benefit for the symptoms of ADHD in children and adolescents. The majority of data showed no benefit of PUFA supplementation, although there were some limited data that did show an improvement with combined omega-3 and omega-6 supplementation

Combined ω 3 and ω 6
Supplementation in Children With
Attention - Deficit Hyperactivity
Disorder (ADHD) Refractory to
Methylphenidate Treatment: A
Double Blind, Placebo-Controlled
Study.

Perera H, Jeewandara KC, Seneviratne S, Guruge

J.Child Neurol. 2012 June; 27(6): 747-53.

Statistically significant improvement was found in the treatment group compared with the placebo group ($P < .01$) in the following measures: restlessness, aggressiveness, completing work, and academic performance. Statistically significant improvement was not found at 3 months of treatment between groups but was evident at 6 months of treatment ($P < .05$) with inattention, impulsiveness, and cooperation with parents and teachers. Distractibility failed to show improvement. Effect sizes ranged from 0.3 to 1.1 at 3 months and 0.2 to 1.4 at 6 months for individual symptom variables.

Why Most Biomedical Findings Echoed by Newspapers Turn out to be False: The Case of Attention Deficit Hyperactivity Disorder.

Gonon F, Konsman JP, Cohen D, Boraud T

PLoS One. 2012;7(9):e44275. Epub 2012 Sept 12.

OBJECTIVE

To determine whether newspapers preferentially report on initial findings and whether they also report on subsequent studies.

CONCLUSION

Because newspapers preferentially echo initial ADHD findings appearing in prominent journals, they report on uncertain findings that are often refuted or attenuated by subsequent studies. If this media reporting bias generalizes in health sciences, it represents a major cause of distortion in health science communication.

Neurofeedback for the treatment of children and adolescents with ADHD: a randomized controlled clinical trial using parental reports.

Duric NS, Assmus J, Gundersen DI, Elgen IBBMC Psychiatry. 2012 Aug 10; 12(1): 107. [Epub ahead of print]

BACKGROUND

A randomized and controlled clinical study was performed to evaluate the use of neurofeedback (NF) to treat attention-deficit/hyperactivity disorder (ADHD) in children and adolescents

CONCLUSIONS

NF was as effective as methylphenidate at treating the attentional and hyperactivity symptoms of ADHD, based on parental reports

Evidence-Based Information on the Clinical Use of Neurofeedback for ADHD

Moriyama TS, Polanczyk G, Caye A, Banaschewski T,
Brandeis D, Rohde LA.

Neurotherapeutics. 2012 Aug 25. [Epub ahead of print]

COMMENTS

1. NF is a training to enhance self-regulatory capacity over brain activity patterns and consequently over brain mental states
2. Recent findings suggest that NF is a promising alternative treatment for ADHD
3. Most nonrandomized controlled trials found positive results with medium-to-large effect sizes, but the evidence for effectiveness are less robust when only randomized controlled studies are considered.
4. Direct comparison of NF and sham-NF in 3 published studies found no group differences.
5. No safety issues have emerged

COMMENTS

6. Currently there is no available data to guide clinicians on the predictors of response to NF and on an optimal treatment protocol.
7. Further evidence is required

A Review of Neurofeedback Treatment for Pediatric ADHD

DE Lofthouse, N., Arnold, L. E., Hersch, S., Hurt, E.,
DeBeus, R.

Journal of Attention Disorders July 2012 vol. 16 nl. 5
351-372

CONCLUSION

Based on the results and methodologies of published studies, this review concludes that NF for pediatric ADHD can be currently considered as “probably efficacious.”

Transcranial Magnetic Stimulation (TMS) in the Treatment of Attention-Deficit/Hyperactivity Disorder in Adolescents and Young Adults: A Pilot Study.

Weaver L, Rostain AL, Mace W, Akhtar U, Moss E, O'Reardon JP.

J ECT. 2012 Apr 30. [Epub ahead of print]

OBJECTIVE

Transcranial magnetic stimulation (TMS) uses a medical device that applies magnetic pulses noninvasively to the cortex of the brain to depolarize neurons. We tested its safety and efficacy in young persons with a diagnosis of attention-deficit/hyperactivity disorder (ADHD).

CONCLUSION

Transcranial magnetic stimulation was found to be safe, with no serious adverse events observed in this pilot study. Improvement in symptoms was observed across the combined phases of the study, although there was no difference between the active and sham forms of TMS.

Complications

Peer Rejection and Friendships in Children with Attention-Deficit/hyperactivity Disorder: Contributions to Long-Term Outcomes.

Mrug S, Molina BS, Hoza B, Gerdes AC, Hinshaw SP, Hechtman L, Arnold LE

J Abnorm Child Psychol. 2012 Feb 14. [Epub ahead of print]

OBJECTIVE

To examine whether peer rejection and lack of dyadic friendships experienced by children with ADHD after treatment contribute to long-term emotional and behavioral problems and global impairment

and

Whether having a reciprocal friend buffers the negative effects

FINDINGS

Peer rejection predicted cigarette smoking, delinquency, anxiety and global impairment at 6 years and global impairment 8 years after baseline.

Having a reciprocal friend was not uniquely predictive of any outcome and did not reduce the negative effects of peer rejection.

**SUICIDAL BEHAVIORS IN
ADOLESCENTS WITH ADHD:
ASSOCIATIONS WITH DEPRESSIVE
AND OTHER COMORBIDITY,
PARENT-CHILD CONFLICT, TRAUMA
EXPOSURE, AND IMPAIRMENT**

DE Daviss, W.B., Diler, R.S.

Journal of attention Disorders July 19, 2012

1087054712451127

CONCLUSION

Apart from depression, clinicians should pay particular attention to parent-child conflict, victimization trauma, and social impairment rather than levels of ADHD symptoms when weighing the likelihood of SB in youth with ADHD

Marital Satisfaction amongst Parents of Children with Attention Deficit Hyperactivity Disorder and Normal Children.

Mohammad Reza Mohammadi MD, Farideh Farokhzadi
Msc, Ahmad Alipour PhD, Reza Rostami MD, Mehdi
Dehstani PhD, Maryam Salmanian Msc

Iran J Psychiatry 2012; 7: 120 – 125

OBJECTIVE

The aim of this study was to compare marital satisfaction between parents of children with attention deficit hyperactivity disorder (ADHD) and parents of normal children.

CONCLUSIONS

Findings indicate that parents with ADHD children have lower level of marital satisfaction than parents with normal children.