CADDRA Newsletter – Fall 2011

1. **AGM Notice / 2011 CADDRA Conference**
   CADDRA members are invited to this year’s annual general meeting which will begin at 5pm, Saturday, October 15th at the Marriott Toronto Downtown Eaton Centre Hotel. The AGM takes place during the 2011 CADDRA annual conference.

   This year’s conference “ADHD Research into Practice: A Global View” features invited speakers from Canada, the US and Europe, who are among the best known ADHD experts worldwide. It will open Friday, October 14th at 6pm and run until Sunday, October 16.

   Full details of this year’s conference can be found on the CADDRA website (www.caddra.ca). Online conference registration: [https://secure.effreg.com/register/adhd2011](https://secure.effreg.com/register/adhd2011)

2. **CADDRA 2nd Annual Poster Competition**

3. **CADDRA member wins Berlin Poster Award**

4. **Advisory: Victoza diabetes medication and ADHD medication**

5. **CADDRA support for CPA paper on medication access**

6. **Journal Watch: Blood Pressure and Heart Rate Over 10 Years in the Multimodal Treatment Study of Children with ADHD.**

7. **Journal Watch: Adult attention deficit hyperactivity disorder is associated with asthma.**

8. **Journal Watch: Mediating factors associated with pedestrian injury in children with attention-deficit/hyperactivity disorder**

9. **Journal Watch: Rare Copy Number Variation Discovery and Cross-Disorder Comparisons Identify Risk Genes for ADHD**

10. **Journal Watch: Written-Language Disorder Among Children With and Without ADHD in a Population-Based Birth Cohort.**
2. **CADDRA 2nd Annual Poster Competition**
   Poster entrants for the 2nd Annual CADDRA poster competition will be on display at the annual conference. This year’s competition reflects the international appeal of the CADDRA meeting, with submissions from Mexico, Japan, USA and Turkey as well as Canada. The poster session, which provides attendees an opportunity to discuss the research with the poster author(s), is scheduled from 7.15 – 8.30pm on Friday, October 14. The posters will be on display at the conference on Friday evening and all day Saturday. Winners announced on Sunday. See the accepted abstracts on the CADDRA website: [www.caddra.ca/cms4/index.php?option=com_content&view=article&id=213&Itemid=360&lang=en](http://www.caddra.ca/cms4/index.php?option=com_content&view=article&id=213&Itemid=360&lang=en)

3. **CADDRA Member Wins Berlin Poster Award**
   Congratulations to CADDRA member Isaac Szpindel whose poster was awarded best in category/session for Adult ADHD Diagnosis at the World Federation of ADHD meeting in Berlin in May. The poster “Symptom Quality vs Quantity in Adult ADHD Diagnosis” was one of three posters presented at the meeting by the Toronto-based neurologist.

4. **Advisory: Victoza diabetes medication and ADHD medication**
   Physicians need to be aware that a medication for the treatment of Type 2 Diabetes, Victoza, may be of concern when the patient is also being treated with ADHD medication. When asked about the use of Victoza in patients receiving treatment for ADHD, the company, Novo Nordisk Canada, reported no studies to evaluate this to date. The company added: "However, Victoza caused a delay of gastric emptying. Therefore it is suggested to follow up with patients on any drug that has an effect on delay in gastric transition time. Also, please note that Victoza is endogenously metabolized in a similar manner to large protein without a specific organ as a major route of elimination."

5. **CADDRA support for CPA paper on medication access**
   CADDRA supports the new Canadian Psychiatric Association position paper on equal access to medication in Canada. The paper, which includes discussion on long acting ADHD medications, can be linked to from the CADDRA website (under updates, medications). A pdf of the paper is available here:

   Blood Pressure and Heart Rate Over 10 Years in the Multimodal Treatment Study of Children With ADHD. Vitiello B et al.
   
   This publication reports on a ten year study looking at whether prolonged childhood exposure to stimulant medication to treat ADHD increases the risk of the child developing abnormalities in blood pressure or heart rate. The data was collected as part of the Multimodal Treatment Study of Children with ADHD (MTA), a publicly funded multisite randomized controlled trial that compared the effectiveness of different treatment interventions for children with ADHD. A total of 579 children, aged 7-9, were randomly assigned to 14 months of medication treatment,
behavioural therapy, a combination of the two, or usual community treatment. The controlled trial was followed by naturalistic treatment with periodic assessments.

The study detected no treatment effect on either systolic or diastolic blood pressure. However, children who were treated with stimulants had a higher heart rate (mean=84.2 bpm [SD=12.4] on medication alone and mean=84.6 bpm [SD=12.2] on medication plus behavioural therapy) than those who were treated with behavioural therapy alone (mean=79.1 bpm [SD=12.0]) or those who received usual community treatment (mean=78.9 bpm [SD=12.9]) at the end of the 14-month controlled trial, but not afterwards. Stimulant medication did not increase the risk for tachycardia, but greater cumulative stimulant exposure was associated with a higher heart rate at years 3 and 8.

The study authors, who included CADDRA Board member Lily Hechtman, conclude that stimulant treatment did not increase the risk for prehypertension or hypertension over the 10-year period of observation. However, stimulants were shown to have a persistent adrenergic effect on heart rate during treatment, and even after years of treatment. The authors say this effect may have clinical implications especially for individual patients with underlying heart abnormalities, and deserves further investigation.


While previous studies concerning a potential relationship between Attention Deficit Hyperactivity Disorder (ADHD) and asthma have not presented consistent results, a Norwegian study points to a comorbidity of ADHD and asthma, and suggests these patients may represent a clinical and biological subgroup of adult patients with ADHD.

The study involved a cross-sectional study of 594 adult patients diagnosed with ADHD, compared with 719 persons from the general population. Information was collected between 1997 and 2005 using auto-questionnaires rating past and present symptoms of ADHD, co-morbid conditions, including asthma, and work status.

The prevalence of asthma was significantly higher in the ADHD patient group compared to the controls, 24.4% vs. 11.3% respectively (OR = 2.54, 95% CI 1.89-3.44), and controls with asthma scored higher on ratings of both past and present symptoms of ADHD. Female ADHD patients had a significantly higher prevalence of asthma compared to male ADHD patients (30.9% vs. 18.2%, OR = 2.01, CI 1.36-2.95), but in controls a slight female preponderance was not statistically significant. In both ADHD patients and controls, having asthma was associated with an increased prevalence of symptoms of mood- and anxiety disorders.

Unintentional injury is the leading cause of death in children. This study examined the difference in pedestrian behaviour between children with ADHD, compulsive type (ADHD-C) and a control group. Pedestrian injury is a major cause of unintentional injury in children.

The U.S. study included 78 children aged 7 to 10 years (39 children with ADHD-C diagnoses and 39 age- and gender-matched typically developing children).

The authors found that although the children with ADHD-C seemed to display appropriate “curbside pedestrian behaviour” (e.g. looking left and right and waiting to cross), they sometimes made incorrect decisions about when to cross the street and how long it will take to get to the other side. This failure to adequately process perceived information could be attributed to deficits in executive functioning.

9. Journal Watch: Rare Copy Number Variation Discovery and Cross-Disorder Comparisons Identify Risk Genes for ADHD, Sci Transl Med 3, 95ra75 (2011); Anath C. Lionel, et al. Full article by subscription: http://stm.sciencemag.org/content/3/95/95ra75.abstract

The authors identified de novo (in 1.7% of 173) and rare copy number variations, or CNVs, (in 7.7% of 248) unrelated ADHD patients using million-feature genotyping arrays. The results of the Canadian/German study support the case that rare CNVs may have a role in ADHD risk and reinforce evidence for the existence of common underlying susceptibility genes for ADHD, autism, and other neuropsychiatric disorders.


The authors reviewed information from medical, school, and private tutorial records of 5,718 children born in 1976-1982 who remained in Rochester, Minnesota, after 5 years of age in order to determine the incidence of written-language disorder (WLD) among children with and without ADHD. This is the first population-based epidemiological study of the comorbidity between WLD and ADHD.

In both boys and girls, the incidence of WLD (with or without reading disability (RD)) by 19 years of age was significantly higher for children with ADHD than children without (boys: 64.5% versus 16.5%; girls: 57% versus 9.4%). The study suggests ADHD is strongly associated with an increased risk of WLD (with or without RD) for both genders. However, girls with ADHD are at higher risk of having WLD with RD, compared to boys with ADHD. Both are at the same risk of having WLD without RD.

The authors suggest clinicians give serious consideration to thorough psychoeducation evaluations for written-language disorder for all children with ADHD.