



## COMORBIDITÀ CARDIOVASCOLARI

### STRINGA DI RICERCA:

(cardiovascular OR cardiology) AND psychiatry Filters: Publication date from 2013/04/12

1.

J Psychiatr Res. 2013 Jun 4. pii: S0022-3956(13)00147-7. doi: 10.1016/j.jpsychires.2013.05.007. [Epub ahead of print]

Lower docosahexaenoic acid concentrations in the postmortem prefrontal cortex of adult depressed suicide victims compared with controls without cardiovascular disease.

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#### BACKGROUND:

A growing body of evidence suggests that deficits in long-chain omega-3 (LCn-3) fatty acids may contribute to major depressive disorder (MDD) and principal causes of excess mortality including suicide and cardiovascular disease. In the present study we compared concentrations of docosahexaenoic acid (DHA, 22:6n-3), the principal LCn-3 fatty acid in brain, in the postmortem prefrontal cortex (BA10) of adult depressed suicide victims and controls with and/or without cardiovascular disease.

#### METHODS:

DHA concentrations ( $\mu\text{mol/g}$ ) in the prefrontal cortex (PFC, BA10) of adult male and female suicide victims ( $n = 20$ ) and controls with ( $n = 8$ ) or without ( $n = 12$ ) cardiovascular disease were determined by gas chromatography.

#### RESULTS:

There was a non-significant trend for lower DHA concentrations in suicide victims compared with all controls ( $-10\%$ ,  $p = 0.06$ ,  $d = 0.5$ ). Significantly lower DHA concentrations were observed in suicide victims compared with controls without cardiovascular disease ( $-14\%$ ,  $p = 0.03$ ,  $d = 0.7$ ) but not controls with cardiovascular disease ( $-4\%$ ,  $p = 0.71$ ,  $d = 0.1$ ). There was a non-significant trend for lower DHA concentrations in controls with cardiovascular disease compared with controls without cardiovascular disease ( $-11\%$ ,  $p = 0.1$ ,  $d = 0.6$ ).

#### CONCLUSIONS:

Adult depressed suicide victims exhibit lower postmortem PFC DHA concentrations compared with controls without cardiovascular disease. These data add to a growing body of evidence implicating DHA deficits in the pathophysiology of MDD, suicide, and cardiovascular disease.

2.

Psychosomatics. 2013 Jun 4. pii: S0033-3182(13)00050-9. doi: 10.1016/j.psym.2013.02.010. [Epub ahead of print]

Panic Disorder Prevalence Among Patients Referred for an Electrocardiogram in a Nigerian Teaching Hospital.

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#### BACKGROUND:

Panic disorder is a common chronic illness that is often unrecognized, misdiagnosed, and untreated because it often presents to the physicians with symptoms that are similar to those of emergency medical conditions. One study of the prevalence of panic disorder in the general population in Nigeria has been published, but no studies have examined the prevalence of panic disorder in a sample of Nigerian patients with cardiac symptoms. This study investigated the 12-month prevalence of panic disorder among patients who were referred for an electrocardiogram in a Nigerian teaching hospital.

#### METHODS:

Three hundred consecutive patients who were referred for an electrocardiogram were assessed for panic disorder using the Structured Clinical Interview for DSM-IV (SCID).

## RESULTS:

The prevalence of panic attacks and panic disorder were 10.0% and 7.0%, respectively. Age was associated with the presence of both panic attacks and panic disorder.

## CONCLUSIONS:

This study suggests that panic disorder is common among patients who are referred for an electrocardiogram. It is recommended that patients whose cardiovascular or respiratory symptoms are not well explained by the diseases of such systems be evaluated for mental illness.

3.

Psychosomatics. 2013 Jun 4. pii: S0033-3182(13)00051-0. doi: 10.1016/j.psych.2013.02.011. [Epub ahead of print]

### Protected from Torsades de Pointes? What Psychiatrists Need to Know About Pacemakers and Defibrillators.

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## BACKGROUND:

Consultation-liaison (C-L) psychiatrists are frequently asked to initiate and manage psychotropic drugs, some of which can delay cardiac repolarization, prolong the QT interval, and increase the risk of torsades de pointes (TdP). This task is complicated by the growing number of patients with cardiovascular implantable electronic devices (CIED) [i.e., permanent pacemakers (PPM), implantable cardioverter defibrillators (ICD), and cardiac resynchronization therapy devices (CRT)]. The precise protective role of CIEDs in the prevention and treatment of TdP is not well-defined.

## METHODS:

We review practical tips for assessment of the QT interval in patients with paced rhythms, as well as the basic operative principles of CIEDs. We examine the available clinical evidence for the use of CIEDs in patients at risk for TdP.

## RESULTS:

Most CIEDs have a pacing function that, when utilized appropriately, can offer partial protection against TdP by prevention of bradycardia. Defibrillators deliver shocks and are reasonably effective at terminating TdP; however, recurrent shocks are common and are associated with significant physical and psychological morbidity.

## CONCLUSIONS:

CIEDs are important tools in the management of drug-induced ventricular arrhythmias in spite of significant limitations. The C-L psychiatrist should remain vigilant in recognizing and managing patients at risk for TdP, and refrain from over-reliance on CIEDs regardless of type or settings. Ultimately, the presence of a CIED should serve as a marker of increased risk of TdP.

4.

J Psychiatr Res. 2013 May 28. pii: S0022-3956(13)00144-1. doi: 10.1016/j.jpsychires.2013.05.004. [Epub ahead of print]

### Gender differences in the prospective associations of self-reported sleep quality with biomarkers of systemic inflammation and coagulation: Findings from the Heart and Soul Study.

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Systemic inflammation is proposed as a putative mechanism underlying the link between poor sleep and cardiovascular disease. The aim of present study was to investigate the cross-sectional and prospective associations of self-reported sleep quality with biomarkers of inflammation and coagulation implicated in coronary heart disease (CHD) and to explore whether these associations differed between men and women. To this end, measures of sleep quality and markers of inflammation, including circulating levels of interleukin-6 (IL-6), high-sensitivity C-reactive protein (CRP), and fibrinogen were assessed at baseline in 980 participants with established CHD and 626 at 5-year follow-up. In the sample as a whole, subjective sleep quality was unrelated to inflammatory markers in cross-sectional and prospective analyses. However, in gender stratified analyses, adjusting for age, ethnicity, education, body mass index, and regular snoring, poorer subjective sleep quality at baseline was prospectively associated with 5-year increases in IL-6 ( $b = 0.14$ ,  $SE = 0.05$ ,  $p = 0.003$ ), CRP ( $b = 0.21$ ,  $SE = 0.09$ ,  $p = 0.02$ ), and fibrinogen ( $b = 18.02$ ,  $SE = 7.62$ ,  $p = 0.02$ ) in women but not men. These associations remained independent of lifestyle/psychosocial factors, medical comorbidities, medication use, and cardiac function. Women who reported baseline sleep disturbances characterized by a tendency to wake up too early in the morning also showed significant 5-year increases in

circulating IL-6 that withstood covariate adjustment. Further research is necessary to elucidate the pathways that underlie gender-specific associations between subjective sleep quality and markers of inflammation and coagulation as this may help clarify gender disparities in CHD.

5.

Aging Clin Exp Res. 2013 Jun 4. [Epub ahead of print]

Prevalence of cardiovascular disorders and risk factors in two 75-year-old birth cohorts examined in 1976-1977 and 2005-2006.

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#### BACKGROUND AND AIMS:

The number of older people are increasing worldwide, and cardiovascular diseases are the major causes of death in western societies. This study examines birth cohort differences in cardiovascular disorders and risk factors in Swedish elderly.

#### METHODS:

Representative samples of 75-year-olds living in Gothenburg, Sweden, examined in 1976-1977 and in 2005-2006. Blood pressure, s-cholesterol, s-triglycerides, height, body weight, body mass index, history of myocardial infarction, angina pectoris and stroke/TIA, and diabetes mellitus were measured.

#### RESULTS:

The prevalence of total cardiovascular disorders, hypertension and hypercholesterolemia decreased, and the prevalence of stroke increased in both genders. The prevalence of cardiovascular disorders was higher in women than in men in 1976-1977, and higher in men than in women in 2005-2006. The decrease in blood pressure occurred independently of antihypertensive treatment. The prevalence of current smokers decreased in men and increased in women. The prevalence of life-time smokers and diabetes mellitus increased only in women. The proportion on antihypertensive treatment and overweight and obesity increased only in men. Hypertension, overweight and obesity were more common in women in 1976-1977. These sex differences were not observed in 2005-2006.

#### CONCLUSIONS:

The overall prevalence of cardiovascular disorders decreased, and sex differences reversed between the 1970s and 2000s among Swedish septuagenarians. Our findings emphasize the importance of environmental factors, not only for the prevalence of cardiovascular disorders, but also as explanations for sex differences. Reasons for changes could be increased survival in those with disorders and risk factors, changes in lifestyle and diet, and better preventive strategies, such as treatment of hypercholesterolemia and hypertension.

6.

Br J Psychiatry. 2013 May 23. [Epub ahead of print]

Cardiovascular and metabolic risk profile in young people at familial risk of depression.

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#### BACKGROUND:

Depression is associated with increased risk of several general medical conditions, including diabetes and cardiovascular disease. The nature of the association is complex and may involve bidirectional causation or a common pathophysiology.

#### AIMS:

To determine whether young people without depression but at increased familial risk have altered metabolic and blood pressure markers relative to matched controls.

#### METHOD:

We studied young people (n = 85), who had a parent with depression but no personal history of depressive illness (FH+) and healthy controls (n = 69). Cardiovascular risk profile was assessed by a fasting blood sample to measure insulin, glucose, lipids and high-sensitivity C-reactive protein (CRP)

and blood pressure was measured centrally and peripherally. Arterial stiffness and waking cortisol concentration were also measured.

#### RESULTS:

Compared with controls, the FH+ group demonstrated increased peripheral and central systolic blood pressure, increased arterial stiffness and diminished insulin sensitivity but they did not differ from controls in measures of lipids, CRP or waking cortisol.

#### CONCLUSIONS:

Our data suggest that young people at increased familial risk of depression show evidence of altered cardiovascular risk profile in young adulthood even in the absence of depressive symptoms. It is possible therefore that vulnerability to conditions such as hypertension and diabetes may precede the onset of major depression and may share common risk factors.

7.

Int Clin Psychopharmacol. 2013 May 20. [Epub ahead of print]

#### Open-label pilot study on vitamin D3 supplementation for antipsychotic-associated metabolic anomalies.

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Previous studies have linked vitamin D deficiency to hypertension, dyslipidemia, diabetes mellitus, and cardiovascular disease. The aim of this study was to investigate the short-term effects of vitamin D3 supplementation on weight and glucose and lipid metabolism in antipsychotic-treated patients. A total of 19 schizophrenic or schizoaffective patients (BMI>27 kg/m) taking atypical antipsychotics were recruited and dispensed a 2000 IU daily dose of vitamin D3. On comparing baseline with week 8 (study end) results, we found a statistically significant increase in vitamin D3 and total vitamin D levels but no statistically significant changes in weight, glucose, or lipids measurements. Patients whose vitamin D3 level at week 8 was 30 ng/ml or more achieved a significantly greater decrease in total cholesterol levels compared with those whose week 8 vitamin D3 measurement was less than 30 ng/ml. These results suggest that a randomized trial with a longer follow-up period would be helpful in further evaluating the effects of vitamin D3 on weight, lipid metabolism, and on components of metabolic syndrome in antipsychotic-treated patients.

8.

J Gerontol B Psychol Sci Soc Sci. 2013 May 18. [Epub ahead of print]

#### Reduced Activity Restriction Buffers the Relations Between Chronic Stress and Sympathetic Nervous System Activation.

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Objectives. Caregivers of dementia patients are at risk for developing cardiovascular disease (CVD), and this risk increases the longer they provide care. Greater perceptions that caregiving restricts social/recreational activities (i.e., activity restriction [AR]) has been associated with poorer health, and AR may exacerbate the relations between stress and health outcomes. The current study examined the interactive role of greater exposure to stress and increased AR on plasma catecholamine (CAT) levels: norepinephrine (NE) and epinephrine (EPI). Method. A total of 84 dementia caregivers completed a standard assessment battery, and a nurse collected blood, which was assayed for NE and EPI. Separate regressions for NE and EPI were used to determine whether the relations between years caregiving and CATs were greater in those with high versus low AR. RESULTS: A significant interaction was found between years caregiving and AR in predicting resting EPI ( $p = .032$ ) but not resting NE ( $p = .103$ ). Post hoc analyses indicated that years caregiving was significantly associated with EPI when AR was high ( $p = .008$ ) but not when AR was low ( $p = .799$ ). Additionally, years caregiving was not significantly associated with NE when AR was high or low. Discussion. The subjective experience of AR can play an important role in determining risk for detrimental physical health outcomes, particularly CVD risk.

9.

J Am Coll Cardiol. 2013 May 15. pii: S0735-1097(13)01887-1. doi: 10.1016/j.jacc.2013.04.042. [Epub

ahead of print]

Changes in Cardiovascular Risk Factors by Hysterectomy Status with and without Oophorectomy: Study of Women's Health across the Nation.

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**OBJECTIVES:**

To compare the changes in risk factors for cardiovascular disease (CVD) leading up to and following hysterectomy with or without bilateral oophorectomy with the changes observed up to and following natural menopause.

**BACKGROUND:**

Evidence suggests that hysterectomy status with or without bilateral oophorectomy may increase risk for CVD but most studies retrospectively assess menopausal status.

**METHODS:**

Study of Women's Health across the Nation enrolled 3,302 premenopausal women not using hormone therapy between the ages of 42-52 years of age and followed them annually for over 11 years for sociodemographic characteristics, menopausal status, surgeries, body mass index (BMI), medication use, lifestyle factors, lipids, blood pressure, insulin resistance, and hemostatic and inflammatory factors. By 2008, 1,769 women had reached natural menopause, 77 women had a hysterectomy with ovarian conservation, and 106 women had a hysterectomy with bilateral oophorectomy. Piece-wise hierarchical growth models compared these groups on annual changes in CVD risk factors prior to and following final menstrual period (FMP) or surgery.

**RESULTS:**

Multivariable analyses showed that annual changes in CVD risk factors did not vary by group with few exceptions, and the significant group differences that did emerge were not in the anticipated direction.

**CONCLUSIONS:**

Hysterectomy with or without ovarian conservation is not a key determinant of CVD risk factor status either before or after elective surgery in mid-life. These results should provide reassurance to women and their clinicians that hysterectomy in mid-life is unlikely to accelerate women's CVD risk.