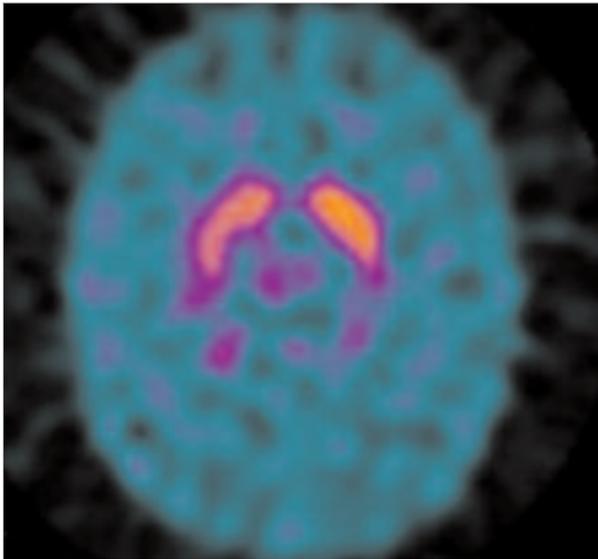


THE PROTOCOLS FOR THE POSTTRAUMATIC STRESS DISORDER PROJECT (PTSD): EPIDEMIOLOGY, PHYSIOPATHOLOGY AND TREATMENT

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In vivo cerebral dopamine transporter (DAT) scan with [99mTc]TRODAT-1 and SPECT of a healthy volunteer. The intense yellow reveals the density of DAT in the striatum. These technique will be used to evaluate the dopaminergic system of PTSD and resilient subjects

To date no study estimating the prevalence of PTSD or any other mental health consequence of exposure to violence has been performed in Brazil. Well-designed epidemiological research can generate awareness, inform authorities responsible for policy, and encourage service development. The “Posttraumatic Stress Disorder Project (PTSD): epidemiology, physiopathology and treatment” refers to a research project which is being conducted in São Paulo City, Brazil, in order to study the impact of violence on the mental health of the Brazilian population. The study involves two phases, each focusing on different objectives and providing complementary information. The first phase is an epidemiological survey on exposure to violence among São Paulo City population and its consequences for mental health as well as a study for validating of the Brazilian version of “Clinician Administered PTSD Scale” (CAPS). The second phase comprises 6 studies on physiopathology of PTSD and two on treatment. The physiopathology issues includes: investigations on risk and protective factors for the disorder; genetic component on etiology; neuropsychological profiles associated with PTSD; the hypothalamus pituitary adrenal (HPA) axis activity in PTSD patients and its relation to traumatic event occurrence in childhood; and structural and molecular neuroimaging of patients and controls. The treatment of PTSD is approached in two studies: a systematic literature review on cognitive behavioral therapy for the treatment of PTSD, and a clinical trial examining the efficacy of topiramate. An animal model of PTSD has been developed to assess the neuroendocrinological and behavioral long-term consequences of maternal deprivation.

SUMMARY OF RESULTS TO DATE AND PERSPECTIVES

- Cognitive behavioral therapy (CBT) is the most common psychotherapy approach for the treatment of PTSD. Our findings suggest that specific therapies, such as CBT, exposure therapy and cognitive therapy are equally effective, and more effective than supportive techniques in the treatment of PTSD.

- The experience of early adversity is an important risk factor for the development of posttraumatic stress disorder (PTSD) and/or major depressive disorder (MDD) during adulthood. Our findings are consistent with the hypothesis that the different forms of biological dysfunction found in patients suffering from PTSD and MDD might be related to the timing of the trauma onset.

- Posttraumatic stress disorder (PTSD), one of the possible consequences of sexual abuse of children and adolescents, may be found in about 40 to 50% of the cases. Treatment with CBT reduces PTSD symptoms in sexually abused children and adolescents, with no differences between therapy with only the victim or with the victim and a family member. No studies compared CBT and pharmacotherapy or the efficacy of combined treatments.

- A critical review of scientific literature showed that stress can be divided in stages to facilitate specific terminological adjustments to the event itself, to the subject-event interaction and to psychological responses. This study updates the etymological origins and applications of these words, connects them to the expansions of meanings that can be operated in the clinical care of patients with posttraumatic stress disorder, and analyzes them critically according to the criterion A of DSM-IV and ICD-10.

- Child maltreatment has been associated to different psychiatric disorders. The pathophysiology of posttraumatic stress disorder appears to be related to a complex interaction involving genetic and environmental factors. In contrast with studies involving adults, where the hippocampus volumetric reduction is the most consistent finding, studies involving children and adolescents with posttraumatic stress disorder have demonstrated smaller medial and posterior portions of the corpus callosum.

- A proposed explanation for memory impairments in posttraumatic stress disorder (PTSD) is stress-induced hippocampal damage due to elevated cortisol levels. Both reduced hippocampal volume and cognitive alterations have been consistently described in PTSD subjects. Our findings suggest that learning and executive functioning impairments observed in subjects with PTSD might be related to left hippocampal atrophy. Future follow-up studies examining larger samples are warranted to validate these preliminary findings.

- Early stress represents a major risk factor for psychiatric pathologies, including anxiety disorders and depression. Maternal deprivation (MD) for 24h during the stress hyporesponsive period may be a useful tool for the understanding of early trauma-induced neurobiological vulnerability to stress-related diseases. Our results indicate that MD induced a hyperresponsiveness to the psychological stressor.

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