POSTTRAUMATIC STRESS DISORDER: NEUROENDOCRINE AND PHARMACOTHERAPEUTIC APPROACH

Ioana Cristina Amihăesei¹, O. C. Mungiu²
University of Medicine and Pharmacy "Grigore T. Popa" - Iasi,
Faculty of Medicine
1. Department of Histology
2. Department of Pharmacology

POSTTRAUMATIC STRESS DISORDER: NEUROENDOCRINE AND PHARMACOTHERAPEUTIC APPROACH (Abstract): Posttraumatic stress disorder (PTSD) is represented by the development of characteristic symptoms, that appear following direct/indirect exposure to a traumatic event in which physical harm was threatened, witnessed or experienced. PTSD can also occur after the unexpected death of a family member or close friend, following a serious harm or threat of death or injury to a loved one, or in case of divorce or unemployment. It occurs in 1%-4% of the population. As neuroendocrine pattern, PTSD is characterized by abnormal low cortisol levels and higher than normal epinephrine and norepinephrine levels. In chronique forms a total decrease of the hippocampal volume, was found, region of the brain involved in processing memories and in the memorization process. Symptoms are grouped in three main categories: re-experiencing the event, accompanied by anxiety, nightmares and flashbacks; persistent avoidance of any reminders of the event, feeling detached or estranged from others; persistent anxiety and/or physical reactivity. As treatment, besides various psychotherapy techniques, various classes of psychotropic drugs are used, such as morphine, antipsychotics, usual or atypical antidepressants, anti-convulsants, to reduce anxiety, avoidance, nightmares and hyperexcitability. Key-words: POSTTRAUMATIC STRESS DISORDER (PTSD), CORTISOL

DEFINITION AND HISTORY

Posttraumatic stress disorder is a severe anxiety disorder that may develop after exposure to any event those results in psychological trauma. The event involves the threat of death to oneself or to someone else or to one’s own or someone else’s physical, sexual, or psychological integrity, overwhelming the individual’s ability to cope.

One of the first descriptions of PTSD was made by Herodotus, who described an Athenian soldier with no war injury, but who became blind after witnessing the death of a fellow soldier, during the Battle of Marathon.

In the early 1800’s military medical practitioners diagnosed soldiers with “exhaustion” after the stress of battle. One-tenth of the mobilized Americans were hospitalized for mental problems, between 1942 and 1945, and after thirty-five days of uninterrupted combat, 98% of them suffered psychiatric disturbances of various degrees (1).

Modern understanding of PTSD situates in the 1970s, especially as a result of expe-