Immune System And Anorexia

The immune system is weakened due to the emphasis that the neuroendocrine system has on it. Most studies have been on the neuroendocrine system. The neuroendocrine system controls the hormones balances within the body which affect the production of leukocytes. Patients with anorexia have severe hormone imbalances due to the lack of nutrition and this causes immunodeficiencies with the antibodies that directly interact with the hormones.

According to research at the University of Semmelweis in Budapest, there were not significant immunological differences in those with anorexia compared to those who did not have anorexia when exposed to a pathogen. The patients with anorexia did have lower levels of CD4/CD8 t-cell ratios due to the lowered amount of CD4 cells and lower levels of CD3 cell counts.

Despite the impairment of certain lymphocytes, anorexia patients were not more susceptible to common infections. This may have been due to compensatory effects of peripheral blood serum enhancing interleukin (IL) secretion. The involvement of IL-6 receptors was specifically found to be significantly reduced in anorexia patients than the control group (S?otwi?ska, 2017).

People suffering from anorexia have higher levels of hunger control hormones, specifically ghrelin, a hormone that interacts with insulin and leptin to control hunger. This is due to the lower amount of IgG, IgM, and IgA ghrelin antibodies in people with anorexia (S?otwi?ska, 2017). The decrease in antibodies is due to the extended high levels of plasma ghrelin levels, so the body gets habituated to having a high amount and overtime maintains a lower level of antibodies.

Questions

The purpose of writing the article was to inform and confirm the physiological impact of malnutrition due to anorexia. The intended audience has some knowledge of immunology and a decent understanding of how biology works. The author avoids bias and assumptions and sticks to factual evidence and statistics on anorexia and the effects it has. This was evident in the writing style of the author. The writing style was professional and factual without placing emotion into it.

The methods used in obtaining data were not that of this author’s gathering, but a collection of studies from other researchers. Most of the studies were done at a rehabilitation facility because tracking people with the disorder without having them in a collected environment would be expensive and time-consuming. The author referenced the facts from their paper with the research and studies done by others to back up their arguments.

The conclusions of the author were the findings on the relevant and non-relevant fluctuations in the immune system. There were significant findings in the decrease of T-cell populations and decreased adhesion of the neutrophil during inflammation. There was also a shown effect in glutamine given to patients and a positive effect on the immune system’s performance. Chronic stress and depressive states also play a significant role in the reduced immune system. Although immunodeficiency is not a common occurrence in patients with anorexia nervosa,

there is still an impact.