

10. THE STUDY OF THE IL-1b, TNF alfa, TGF AND VEGF AMONG PATIENTS WITH ISCHEMIC STROKE

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As already well known, the initial ischemic brain damage leads to robust activation of the immune system. Its clinical pathophysiology is characterized by more complexity. According to the literature, numerous plasma inflammatory markers are elevated within patients with stroke compared to healthy populations. In general, cytokines are known as the chemical mediators that control immune cell homeostasis; They are the pivotal players in several ongoing processes and significant involvement to coordinating signal-dependent immune responses. Moreover, cytokine signaling pathways include several regulatory checkpoints. Also, different pattern of immuno-inflammatory activation is associated with stroke subtypes. We aimed to investigate some cytokines within patients with Ischemic Stroke and the control group. Using the ELISA methods, were assayed cytokine levels. We evaluate the following cytokines in the present work: IL-1b, TNF alfa, TGF, and VEGF in both groups. We investigated a total of thirty control and Thirty patients with ischemic stroke in the present study. Statistical analysis of experimental data was processed using the program Graphpad Prisma 9, $P < 0.05$ was statistically significant. Our study revealed that levels of IL-1b, TNF alfa, TGF, and VEGF were increased within patients with Ischemic Stroke compared to the control group. Thus, the mentioned cytokines play an essential role in cellular signaling and regulation; accordingly, their alteration has significant implications outcome of stroke severity of ischemic stroke.

Keywords: Cytokines, Stroke, ischemic stroke, Georgian Population

11. THE IL-1b, IL-23 AND IL-20 IN PATIENTS WITH HEMORRHAGIC STROKES Ilia Nakashidze¹, Shota Nakashidze, Ia Pantsulaia², Shorena Potskhishvili², Irina Nakashidze¹

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Hemorrhagic stroke (HS) correlates with high rates of mortality and disability. According to literature patients with hemorrhagic strokes compared to ischemic strokes revealed a worse functional/clinical status during intensive rehabilitation. Notably, the studies showed that hemorrhagic stroke patients are younger, needed a longer and more intensive hospitalization, also suffered from more severe initial stroke severity compared to ischemic stroke ones. As already well known the Inflammation/host immune response has the significant contribution in the ongoing process of the hemorrhagic stroke' pathophysiology. However, the systemic immune and inflammatory reactions within hemorrhagic strokes are not fully understanding. In the present study, we aimed to investigate some cytokines within HS. In our study, we include one hundred health control and thirty patients with HS. We evaluate the following cytokines in the present work: IL-1b, IL-23 and IL-20 within both groups (patients, health control). Statistical analysis of experimental data was processed using GraphPad Prisma 9.2, $P < 0.05$ was statistically significant. Our study revealed that levels of the levels of IL-23 were decreased within patients compared to the control group. Notably, IL-20 levels significantly decreased within HS; IL-1b level was increased within patients.

Keywords: Hemorrhagic stroke, Georgian Population, IL-1b, IL-23, IL-20

12. Blood rheological properties as an assessment of various types of anesthesia in surgical trauma caused by polyp-like formations.

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We examined 46 patients with polypoid formations. Patients of group I (36 patients) underwent office hysteroscopy (outpatient, using local anesthesia), patients of group II (10 patients) underwent surgical hysteroscopy under general anesthesia. In group I the average age was (49 ± 3.8) years, in group II - (45 ± 7.5) years. The duration of the operation in both cases was about 30 minutes. There were no statistically significant differences in condition and diagnosis, as well as in age between groups ($p > 0.05$). Criteria for inclusion of patients: presence of indications for routine hysteroscopy. Exclusion criteria: patients with chronic diseases, infections, alcoholism. Patients taking anticoagulant medications. We examined the standard parameters recommended by the international health care system. Also, we investigate the original parameters (non-standard parameters, which we use in this pilot study) in our target and control groups. The particular importance of studying the rheological properties of blood during surgical trauma is due to the fact that both the disease itself and its surgical treatment are risk factors for the development of systemic circulatory disorders. In the