

Interleukina-10 u chorych na raka krtani leczonych operacyjnie lub radioterapią

Interleukin-10 in laryngeal cancer patients treated by surgery or radiotherapy

Summary

Introduction: The early detection and right monitoring of the laryngeal cancer make a better chance of recovery. Therefore factors that might be showing the presence of neoplastic process are constantly being looked for. The detection of correlation between incidence of cancer and immunity system disorders makes us look for and try to answer an important question: are there any factors that might be cancer markers in immunity system? Cytokines are molecules that regulate the process of differentiation and proliferation. They are also the mediators of immunological and inflammatory reactions. Interleukina-10 (IL-10) is a cytokine that has various important functions stimulating immunity processes. IL-10 is a factor stimulating killer cells/cytotoxic lymphocytes/ and is able to kill cancer cells growth spontaneously. It has been detected that some cancer cells can produce some IL-10, too. **The aim** of the study was to evaluate the serum level concentration of IL-10 in the laryngeal cancer patients before any medical treatment and its denotation after surgery or radiotherapy. **Material and methods:** A group of 43 male patients with laryngeal cancer was considered for the purpose of this study. 22 patients were treated by surgery and 21 by radiotherapy. In all the cases the serum concentration of IL-10 before the treatment, in the first and 30th days after therapy was evaluated. The results were compared with the group of 20 healthy volunteers. **Results:** The mean value of IL-10 concentration in laryngeal cancer patients treated by surgery was 14.0 pg/ml before treatment, 12.8 pg/ml in the 1 day and 14.4 pg/ml 30 days after the therapy. IL-10 concentrations in patients treated by radiotherapy were respectively: 15.4, 14.4 and 15.9 pg/ml. The mean value of IL-10 in the control group was 4.9 pg/ml. The serum concentrations of IL-10 in the laryngeal cancer patients were significantly higher than in the control group. These IL-10 concentrations didn't change significantly after the surgery or radiotherapy. **Conclusion:** The serum concentration of IL-10 in the laryngeal cancer patients is significantly higher than in the healthy control group. The changes of serum concentrations after the surgery or radiotherapy of laryngeal cancer patients are not significant and characteristic.