Oxidative stress, antioxidants and cancer (orthomolecular therapy)
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Introduction: The tumorigenic process is not only congenital or dependent on age, nutrition is next to smoking one of the main reasons for canceration. The world cancer report of the world health organisation estimates that 30 % of all cancer cases are diet-related. Also lifestyle, physical training and overweight play a significant role in canceration. That was the main reason why I wanted to know how important a healthy, well-balanced and nutrient-rich nutrition (or supplementation) for prevention and therapy of cancer is.

Materials: In a study from 2009 it has dealt with the subject of nutrition and orthomolecular supplementation in lung cancer patients. In cancer and its treatment plays a nutritional imbalance a major role. A balanced diet or supplements can be compensated for this imbalance [5].

Since the reduced glutathione decreased by environmental influences, it can no longer sufficient for the regulation of the redox potential is available. The result is a disorder of biological electron flow between the cells, which of course can lead to serious diseases. For all life-threatening, chronic diseases, there is a lack of GSH [15].

In a study from 1996, was the effect of GSH and S-acetyl glutathione explored in some tumor cell lines. As GSH, and S-acetyl glutathione was applied to tumor cells, apoptosis has been initiated but not in normal cells. The results have shown that GSH and S-acetyl glutathione precursors may be selective apoptosis in malignant cells. Very good is also that is taken in normal cells, no apoptosis [8].

Results/discussion: By application of orthomolecular therapy, not only symptoms are treated, but also the causes. It forms the basis for therapeutic and preventive measures. However, it should be taken primarily on a healthy diet and can only be substituted if a hazardous defect arises.

Conclusion: There now is no doubt that treatments with antioxidants significantly increase the chance of cancer patients in the fight against cancer. Through a healthy diet can promote the supply status of the population’s health and reduce the manifestation of disease or even prevent it. Glutathione is the most important antioxidant in the human body. Carcinogens in animal studies are inhibited by administration of glutathione. It is recommended to check for diseases and glutathione leave only if the substitution is necessary. The reduction of side effects during chemotherapy by transfer of glutathione is confirmed, however, warned against simultaneous application of glutathione, as it can lead to a weakening of the effect of chemotherapeutic agents.
References:

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