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Study of Bio-Chemical Status on Antioxidants, Lipid Profiles and Minerals in Hypothyroidism

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Abstract: Thyroid hormone is considered as one of the important physiological regulators of metabolic activities of tissues. Any alteration in its status leads to changes in basal metabolic rate and effects cellular respiration. It has been suggested that activation of mitochondria respiration by thyroid hormone results in increased ROS production followed by oxidative stress in several tissues of vertebrates. Thyroid hormone plays a major role in the maturation of bone. Deficiency of Thyroid hormone in early life leads to both delay in the development of an abnormal, stippled appearance of the epiphyseal centres of ossification. This study was revealed that the complete lipid profile, per oxidation of lipids, antioxidants and minerals status in hypothyroidism. The levels of plasma lipid peroxidation were found to be markedly increased in hypothyroid patients when compared to normal subjects. The levels of membrane TBARS was significantly elevated in hypothyroid patients as compared to normal subjects. The vitamins levels in plasma and membranes were significantly reduced in hypothyroid patients compared to normal subjects.

Keywords: Bio-Chemical Status, Antioxidants, Lipid Profiles, Minerals in Hypothyroidism.

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