

عنوان مقاله:

Lipid peroxidation and antioxidant enzymes activity in controlled and uncontrolled Type ۲ diabetic patients

محل انتشار:

مجله آریا آترواسکلروز، دوره 12، شماره 3 (سال: 1395)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Mahnaz Zarei - *Department of Cellular and Molecular Nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran*

Zahra Farahnak - *Department of Cellular and Molecular Nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran*

Mohammad Javad Hosseinzadeh-Attar - *Associate Professor, Department of Clinical Nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran*

Mohammad Hassan Javanbakht - *Assistant Professor, Department of Cellular and Molecular Nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran*

Payam Hosseinzadeh - *Department of Nutrition and Biochemistry, The International Campus, Tehran University of Medical Sciences, Kish, Iran*

Hoda Derakhshanian - *Department of Cellular and Molecular Nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran*

Payam Farahbakhsh-Farsi - *Assistant Professor, Department of Cellular and Molecular Nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran*

Mahmoud Djalali - *Professor, Department of Cellular and Molecular Nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran*

خلاصه مقاله:

BACKGROUND: This study was designed to compare lipid peroxidation and antioxidant enzymes activity in Type ۲ diabetes patients with good or weak glycemic control. **METHODS:** In this case-control study, ۶۲ Type ۲ diabetic patients with glycated hemoglobin (HbA1c) between ۶ and ۸ were enrolled as the controlled group and ۵۵ patients with HbA1c > ۸ were selected as an uncontrolled group. Patients were all referred to Iranian Diabetes Association in Tehran, Iran, from ۲۰۱۰ onward. Groups were chosen by convenience sampling and were matched based on age, sex and duration of disease. Demographic questionnaire, two ۲۴-hour food recall, HbA1c, insulin, malondialdehyde (MDA), superoxide dismutase (SOD), and catalase were measured in blood samples. Data were analyzed by Food Processor II and SPSS software. **RESULTS:** A mean daily consumption of energy, carbohydrate, protein, and fat was not significantly different between two groups. MDA in the uncontrolled group was significantly higher than controlled group (۲.۰۳ ± ۰.۸۸ vs. ۱.۶۵ ± ۱.۰۱ nmol/ml; $P = ۰.۰۳۰$). A mean SOD was slightly higher in the uncontrolled group

comparing to the control group (143.3 ± 101.9 vs. 128.0 ± 127.3 U/g Hb; $P = 0.000$). CONCLUSION: These data suggest that MDA as a lipid peroxidation indicator is higher in uncontrolled diabetes probably due to chronic high blood sugar followed by higher oxidative stress

کلمات کلیدی:

Antioxidant, Lipid Peroxidation, Diabetes Mellitus

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1504801>

