



Study of the Iron Chelating Effect of Green Tea in Smear Positive TB Patients using Sputum Smear, Serum Malondialdehyde and Blood Iron Indices

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ABSTRACT

Green tea with possessing iron chelating properties can be useful in TB treatment and management. We studied the effect of green tea consumption on iron status and improving process of pulmonary tuberculosis treatment (accelerating the negative sputum smear, reducing the level of oxidative stress). Following the approval by Ethics Committee for Human Studies of Golestan and Tehran Universities of Medical Sciences and also obtaining the written consent of patients, this double-blinded randomized clinical trial study, was conducted on patients with TB, who were assigned randomly to the intervention group (41 patients) receiving 500 mg catechin of green tea extract and the control group (39 subjects) receiving placebo for two months, since the beginning of concomitant anti-TB treatment. Sputum evaluation was carried out on three slides using the Ziehl Nelson method. At first, the demographic and dietary intake data were obtained. After obtaining 10 ml of venous blood, Hemoglobin (Hb), Transferrin, Ferritin, Total iron binding capacity (TIBC), Iron and Serum malondialdehyde (MDA) were measured at the beginning and end of the study. Sputum samples were collected from the third week (every 10 days) and the reduction of microbial load was also tested until sputum smear became negative.



1. Susceptibility patterns of Escherichia coli: Prevalence of multidrug-resistant isolates and extended spectrum beta-Lactamase phenotype
2. Morphological pattern and frequency of thyroid tumors
3. Clinico-morphological pattern of intracranial tumors in children
4. Clinico-morphological pattern and frequency of bone cancer

Biography Dr. Shahryar Eghtesadi received Bachelor degree in Nutrition Science and Food Chemistry 1975, from ShahidBeheshti University of Medical Sciences, Tehran; MSPH degree in Nutrition, 1977, from Tehran University of Medical Sciences, Tehran and PhD from University of California at Davis(UCD), USA, in Nutrition (1985)..

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