Abstract

Introduction: Metabolic, biochemical and enzymatic alterations are common in patients with cancer. Medicinal fungi has been used as adjuvants in cancer therapy due to its immunomodulatory and nutritional effects. Objective: The objective of this study was to evaluate the metabolic and blood pressure effects on patients with colorectal cancer after dietary supplementation with Agaricus sylvaticus. Methods: The methodology used was a randomized, double-blind, placebo-controlled clinical trial conducted at the Base Hospital of the Federal District-Brazil. Samples of 56 patients with colorectal cancer, divided into two groups: Agaricus sylvaticus (30 mg/kg/day) and placebo. Three serum evaluations were conducted throughout the treatment: glucose, total cholesterol, triglycerides, uric acid, urea, creatinine, alkaline phosphatase; total, direct and indirect bilirubin; aspartate aminotransferase and alanine aminotransferase; immunoglobulins A (IgA), G (IgG) and M (IgM); total proteins and protein fractions; blood pressure levels were measured as well. The results were analyzed by Microsoft Excel 2003 and SPSS 14.0 programs, Student’s t test, F statistical test, with p < 0.05. Results: The Agaricus sylvaticus group presented a significant reduction of fasting plasma glucose (p = 0.02), total cholesterol (p = 0.01), creatinine (p = 0.05), aspartate aminotransferase (p = 0.05), alanine aminotransferase (p = 0.04), IgA (p = 0.0001), IgM (p = 0.02), systolic blood pressure (p = 0.0001) and diastolic blood pressure (p = 0.0001). These alterations were not observed in the placebo group. Conclusions: Results suggest that dietary supplementation with Agaricus sylvaticus is capable of providing metabolic benefits to the biochemical, enzymatic and blood pressure parameters of patients with colorectal cancer in the postsurgical phase.

Keywords

Agaricus sylvaticus fungi, Metabolic alterations, Blood pressure, Cancer.