

Role of Body Mass Index, Physical Activity and Nutrients in Cholelithiasis in Guntur, Andhra Pradesh

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ABSTRACT To compare dietary intakes of gallstone patients and controls, 82 gallstone patients and 117 randomly selected control subjects without gallstones were enrolled in the study. The presences of gallstones were determined by ultrasonography. Both patients and control subjects completed a questionnaire exploring their dietary intake. Anthropometric measurements were collected. Blood samples were analyzed for serum glucose, triglycerides, total cholesterol, low density lipoprotein cholesterol (LDL-C), high density lipoprotein cholesterol (HDL-C) and serum calcium. Oral contraceptive usage was significantly higher in gallstone patients than controls. Patients were significantly older than controls, had less physical activity and higher Body Mass Index (BMI). However, HDL-cholesterol, serum calcium levels were found significantly higher in controls. Dietary intake including energy, proteins, refined sugar, sodium, calcium, and iron were significantly higher in patients. Dietary fiber and vitamin C levels were significantly lower in patients. Dietary interventions that emphasize the prevention, effect of some nutrients and the contributory effect of others might provide a method of avoiding the formation of gallstones.