

Thesis Title Evaluation of benfluorex treatment in patients with hyperlipoproteinemia.

Name Ubolwannee Malila

Degree Master of Science (Nutrition)

Thesis Supervisory Committee

Vichai Tanphaichitr, M.D., Ph.D., F.A.C.P.

Chulaporn Roongpisuthipong, M.D.

Gobchai Puavilai, M.D.

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ABSTRACT

The purpose of this study was to evaluate the efficacy of benfluorex in lowering serum lipid levels in 20 patients with hyperlipoproteinemia who attended Nutrition Clinic, Department of Medicine, Ramathibodi Hospital, Bangkok, Thailand. They consisted of 7 men and 13 women. Their mean (\pm SEM) age were 47.2 ± 3.0 yr. Prior to benfluorex treatment, the patients had serum total cholesterol level of 250 mg/dL and above with or without triglyceride level of 200 mg/dL and above. In addition they may have glucose intolerance, and/or hyperuricemia. Each patient participated in a 28-wk study. Throughout the study, they were instructed to decrease their intake of total fat, saturated fat, and cholesterol and increase their linoleate intake. At wk 5 they took 150 mg of benfluorex daily, at wk 6, they took 300 mg of benfluorex daily, and during wk 7-20 they took 450 mg of benfluorex

daily. Out of 20 patients, 20% had xanthoma, 5% had xanthelasma, and 55% had corneal arcus. Thirteen patients were type IIa and 7 patients were type IIb hyperlipoproteinemias. Before receiving benfluorex, the mean (\pm SEM) serum cholesterol, LDL-c, HDL-c and triglyceride levels in type IIa patients were 323 ± 18 , 263 ± 19 , 42 ± 5 and 89 ± 11 mg/dl respectively. After receiving benfluorex for 16 weeks, there were significant decreases in these parameters, except HDL-c. The net changes of serum total cholesterol, LDL-c and triglyceride levels were -14%, -16% and -9% respectively. The mean (\pm SEM) serum total cholesterol LDL-c, HDL-c and triglyceride levels in type IIb patients before receiving benfluorex were 296 ± 19 , 190 ± 10 , 45 ± 2 , and 203 ± 27 mg/dl. After receiving benfluorex for 16 weeks, there were significant decreases in these parameters except HDL-c. The net changes of serum total cholesterol, LDL-c and triglyceride levels were -16%, -9%, -15%, respectively.

During the study, there were no drastic changes in serum uric acid, fasting blood glucose and postprandial blood glucose levels as well as blood pressure because these parameters were initially normal. The decrease in their body weight was most likely due to the restriction of food intake to avoid frequent defecation and loose stool developed during benfluorex treatment. Other biochemical and hematological parameters were within normal limits throughout the study.