

Evaluation of the effectiveness of cinnamon, fenugreek and their combination on patients with type 2 diabetes in Basrah

ABSTRACT

Background: People often seek care from multiple sources outside the formal traditional health care system. One of these sources is the use of Complementary and Alternative Medicine (CAM) including herbal Medications .Diabetic patients are found 1.6 times more likely to use CAM than non diabetic patients.

Aim: To investigate the effectiveness of cinnamon, fenugreek and their combination in type 2 diabetic patients not well controlled by oral antidiabetic drugs.

Methodology: Fifty four diabetic patients who were on oral hypoglycemic drugs were randomly divided into 4 groups. Group 1, 2, 3 and 4 were treated with bran, cinnamon (3 gm) , fenugreek (15 gm), and the combination of fenugreek and cinnamon . HbA1C and 2 h postprandial glucose (PPG) were measured at baseline and 40 days of treatment.

Results: HbA1C level and 2 h (PPG) were significantly declined from baseline with 40 days placebo treatment. Significant reduction in HbA1C was noticed with 40 days cinnamon treatment ($9.37 \pm 2.1\%$ to $8.76 \pm 1.9\%$). This effect was paralleled with reduction of 2 h-PPG from 291 ± 99 mg /100ml at baseline to 233 ± 61 mg/100ml after 40 days treatment. The same changes in HbA1C and 2 h PPG were noticed with fenugreek and even more with the combination of fenugreek and cinnamon.

Conclusions: daily supplementation with cinnamon, fenugreek or their combination to patients not achieving glycemic control with oral antidiabetic medications and diet is effective in lowering HbA1C and 2 h PPG in type 2 diabetic patients.

Keywords: Cinnamon, Fenugreek, type 2 diabetes mellitus, 2 h – PPG, HbA1C.