

The In-Vitro Effects of Palm Date Extracts on Plasma Haemostatic Variables

Bushra Fazlullah

Dubai Medical College

E-mail: bushra.fazel@yahoo.com

Introduction

Many risk factors for CVD including obesity and diabetes are substantially influenced by dietary factors, and since they are modifiable through dietary means; intake of fruit and vegetables is such an important preventive measure by which the risk of CVD can be reduced. In support of the role of thrombolytic drugs in reducing the incidence of death from thrombotic disorders; Flavonoids that are widely distributed in fruits and vegetables, have anti-oxidant and anti-thrombotic properties. Palm date fruit was selected to test its thrombolytic effect. Aim: To investigate the Thrombolytic Activity of Palm date extracts by using an in-vitro "Clot Lysis" procedure. ***Methods: The study included 5, 7 and 9 dates flesh extracts and 18 blood samples. The date flesh extract was prepared. 5ml of venous blood had been collected from healthy

volunteers, incubated for 45 minutes at 37 degree and supernatant had been aspirated. The clots were weighed. Then the extracts, positive control "Tissue Plasminogen Activator" and water as negative control had been applied on blood samples that followed with second incubation for 90 minutes, aspiration of supernatant and weighing the samples again in order to detect clot lysis as a percentage of weight reduction.

Results

There was clot lysis in all samples compared to the negative control. 5 dates extract dissolved 11% of clot weight, while 7 and 9 date extract dissolved 9 and 7 % respectively compared to positive control that dissolved 8 %.

Conclusion

Flesh extract of 5, 7 & 9 dates has proved to have a clot lysis effect compared to tissue plasminogen activator (positive control) & distilled water (negative control).