Abstract:

Diabetes is one of serious clinical problems in all countries. Today suffering from this human

not only because of this illness but also because of its side effects rose. Plants as huge source

of food supplements are helpful for controlling blood glucose and preventing from long-term

effects. According to diversity of herbs in Iran and their therapeutic potential and also

possible risks of chemical drugs, by evaluation of herbs' effects on diabetes we can find some

new ways for treatment. Fruktokinaz enzyme-1 is one of cytsolic enzymes in glycolic way

which has the key role in assigning glycosides. Some effects such as enzyme defect of pfk-1

in skeleton muscles can be recognizing by tiered feeling and decreasing muscle ability. In

some cases also its defects cause fast growing of cancer cells. In this research we will

discussed about effect of alcoholic extract of rattles plant leaves (because of anti-

inflammatory, anti- microbus and anti- diabetes effects) in expressing pfk-1 gene in diabetic

rats of first kind.

In this survey 45 male rats categorized in to three groups randomly; normal control, diabetic

control and treated diabetics by rattles extract. After streptozotocin injection (60 mg/ kg) in

male rats the first kind of diabetes produced. Treated diabetics group received rattles extract

for 30 days. Normal group and diabetic group received distilled water. Then in the day before

extract injection and 15 and 30 days after injection the glucose in blood determined and

expression of PFK-1 liver gene evaluated by using Real- Time PCR method. Results showed

that glucose in blood decreases in day 15. But there is no meaningful relation between

diabetic group and treated one. Expressions of PFK gene in treated diabetic group in day 15

aren't different from diabetic group. And also there isn't any meaningful different for PFK

gene in groups. Therefore injection of hydraulic extract of rattles plant can influence on

expression of phospho- fruktolinaz-1 in first kind of diabetes.

Key words: rattles, phospho-frukto-kinaze-1, first kind of diabetes



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Titl:

Effect of leaf alcoholic extract of prosopisfarcta on gene expression of phosphofrctokinase-1 in diabetic rats (type 1)

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