-----2012 14-1 2 23 -----

(2011 / 11/ 21 2011/ 6 /28 )

35-30 Balb/c
/ 6 . 7-5

. / 10 5 2.5

. / 10 / 5 2.5

. :

## Effect of Salvia Powder on Blood and Histological Picture of Liver and Heart Muscle in Male Albino Mice

Muntaha M. Al-Kattan Janan H. Abdul-Fattah Raja M. Al-Annaz

Department of Biology College of Science University of Mosul

## **ABSTRACT**

The study was conducted to investigate effect of salvia plant powder in some heamatological parameters and histological changes in adult male albino mice, Balb/c breeder 30-45gm. weight, and 5-7 months old. Mice were divided into 4 groups, 6 mice for each. Ratio dried leaves of saliva plant had been powdered and added to the diet in different ratios 2.5, 5, 10 g/kg forage. The treatment of mice was repeated daily for four weeks. The results of the current study showed that the leaves powder of salvia plant had good qualities along with blood values. The treatment lifted number of red blood cells and the concentration of hemoglobin and PCV in all treatments comparing with control group. The white blood cells has increased number in both groups 2.5, 5 g/kg forage and decreased in number in the group 10 g salvia/kg diet. Histological examination also showed the presence of differences some were positive and some were negative for liver tissue and heart comparing with control group.

**Keywords**: dry saga leaves- blood picture- histology of liver &heart.

.(2009 )

Salvia officinalis

.

Thujone C E

.(Rice-Evans et al., 1996)

Saponin Tannin Terpin .(Freitas et al., 2004) .(Lottipour et al., 2007) .(Iodorovs and Phillians, 1984) .Mus musculus Balb/c 6 35-30 7-5 ) °(30-20) 14 .(2004 : Salvia officinalis Lamiaceae (Labiatae) (Usher, 1984) / 10 5 2.5 6 24

3

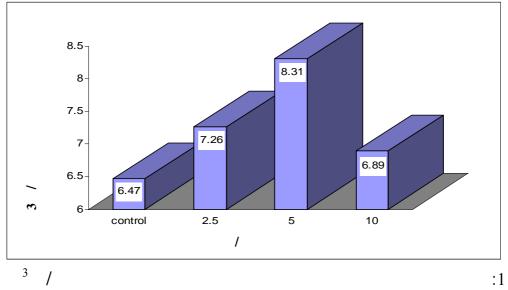
-1 6 -2 6 / 2.5 6 -3 5 -4 6 10 Retro ) (orbital sinus **PCV** .(Jain, 1986) : %10 (1968) Luna 5 (one way ANOVA) (S.N.K) Student Newman Keul's (2010 ) test .(Daniel, 2010) Excell V.2007 SPSS V.15 . / 5 . / 10

S.N.K

(P≤0.001)

(1) / 5

/ 2.5 10



3 /

S.N.K .P≤0.001

(2) 2.5 5

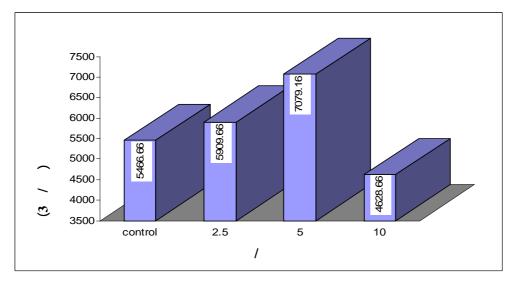
10

P≤0.001

5 (3). 10 2.5

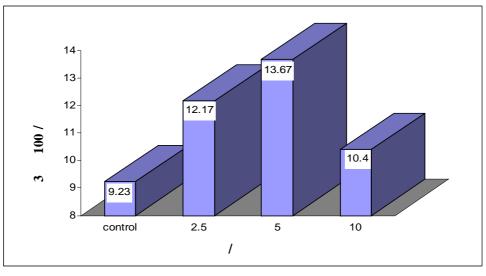
S.N.K .P≤0.001 (4)

10 2.5



(3 / ) :2

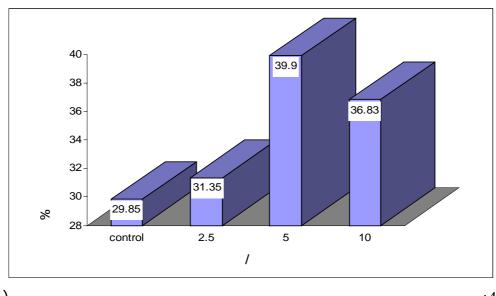
•



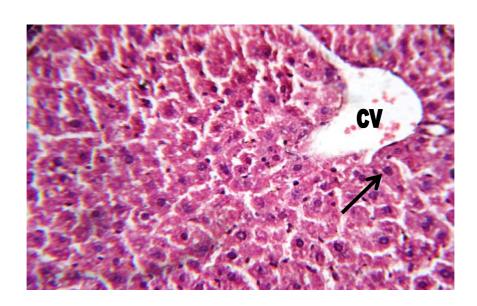
3 100/ :3

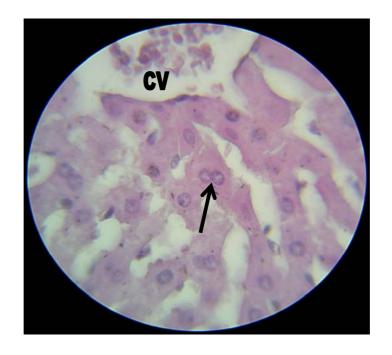
:

7 .....

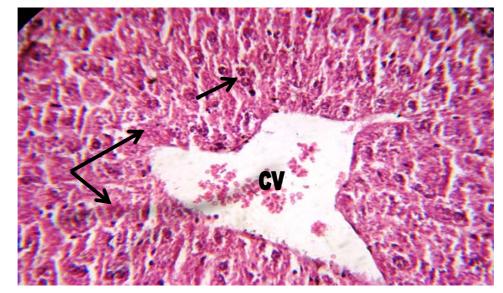


(%)





:6 (H&E) 1000X - ( ) (CV)



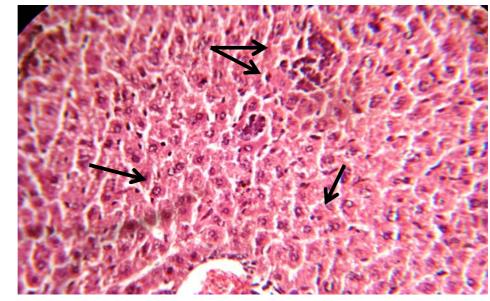
(CV) :7

(H&E) 400 x - (10 )

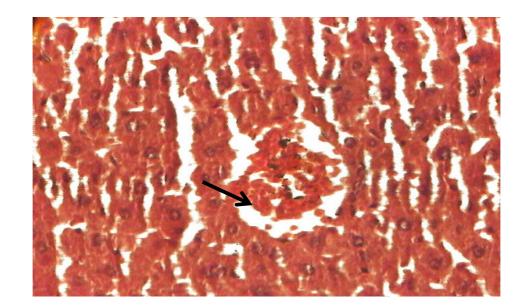
.(11 )

(5 2.5) / 10 .

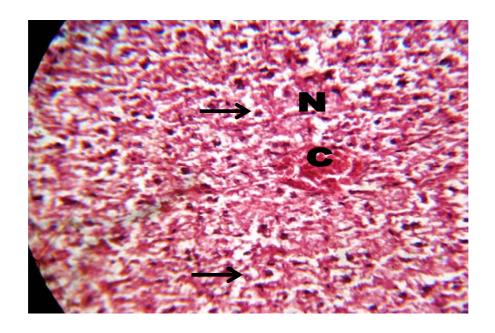
9 .....



( ) :8 (H&E) 400 x - / 5 - ( )



5 - ( ) :9
(H&E) 400 x - /
(12 ) ( )
.(14 ) (13 )



:10 / 10 - **(C)** ( )

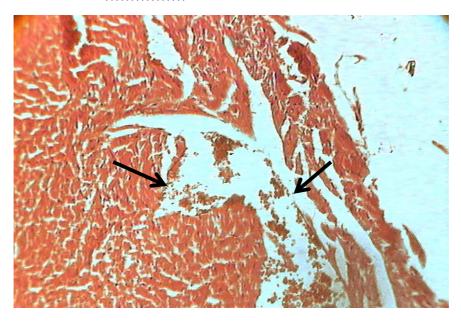
(N)

.(H&E) 400 x -

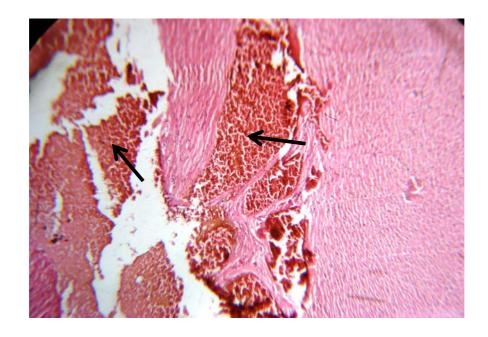


:11 400 x - / 10 -( ) ( )

.(H&E)

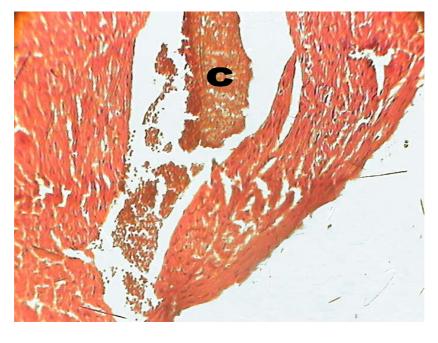


:12



:13

Stem cell



:14

.(H&E) 400 x - / 10 - (C)

/ (10 5 2.5)

C

Е

.

(Rice-Evans and Miller, 1996) Thujone

.(1987 )
/ 5 2.5
.C
/ 10

.(Freitas et al., 2004)

/ 2.5 5

.(Day, 1990)

(2008 )

·

Rice-) Thujone E C

.(Evans and Miller, 1996 / 5 2.5

/ 10 .

.

.165-160 . . . (2009)

A .(2004)

.24– 21 . /

.(2008)

.84-72 **(2)19** 

. . (1987)

- .(2010)

Daniel, W.W. (2010), "Biostatistics". 9th edn. John Wiley and Sons. USA, 783 p. Day, C. (1995). Hypoglyceamic plant compounds practical diabetes. *International*, **12** (6), 269-271.

- Freitas, V. D.; Salvia, P. D.; Leite, C.; Andrade, J.; Barbosa, M. M. P. (2004). Flavonoids from grape seed prevent increase alcohol-induced neuronal lipofusion formation. *Alcohol.* **39**, 303-311.
- Ganong, W. F. (1991). Review of Medical, Physiology. Connecticut Appleton and Lange. *Turk. J. Gastroenterol.* **14**(1), 39-43.
- Iodorovs, A. H.; Phillians, S. L. (1984). Experimental pharmacological study of three species from genus Salvia. *Acta. Physiol. Pharmacol. Bulg. (Sophia)*, **10**(2), 400-409.
- Jain, N.C. (1986). "Shalms Veterinary Hematology." Lea and Febiger, USA, pp. 276-282.
- Lottipour, F., Samiee M., Nazemiyeh H. (2007). Evaluation of the antibacterial activity of *Salvia Sahendica* and *Phlomis caucasica*. Pharmaceutical Science. *J. Facult.y Pharm.* **1**, 29-34.
- Luna, L. G. (1968). "Manual of Histological Staining Methods of the Armed Forces Institute of Pathology." 3rd edn. McGraw-Hill Book company, New York, pp. 5-35.
- Rice-Evans, C. A.; Miller, N.G. (1996). Structure anti-oxidant activity relationship of flavonoids and phenolic acid free radic. *Boil. Med.* **20**, 933-958.
- Usher, G. (1984). "A Dictionary of Plants Used by Man. CBS Publishers and Distributors." Delhi, pp.465-471.