

Study The Analgesic Effect Of The Allium ampeloprasum Seeds Extract On Male Mice Supervised by :-  
Assit. Prof. Dr. Selman Mohammed Selman Ph.D. Pharmacology 2022 A.D. A research Submitted to the  
Department of Community Medicine, the College of Medicine, University of Babylon, as a Partial  
Fulfillment of the Requirements for the Degree of M.B.Ch.B. By:- 1. Zainab Al-Hawraa Faris Sharhan 2.  
Huda Khudhair Sakban 3. Afnan Assad Salih 4. Mays Kadhim Jameel 5. Noor Al-Huda Salam Abd Al-Ridha  
6. Rusul Ihsan Mahmood 7. Ola Haider Hassan 1443 A.H. Certification I certify that this research entitled  
(study the analgesic Effect of the Allium ampeloprasum seeds Extract on male mice) Was prepared by  
)Zainab Al\_Hawraa Faris sharhan, Hada Khudhair sakban, Afnan Assad Salih, Mays kadhim jameel, Noor  
Al huda salam Abd Al ridha, Rusul Ihsan mahmood, Ola Haidar Hassan). Under my supervision in partial  
fulfillment of the requirements for M. B. Ch. B Assist prof. Dr. Selman Mohammed Selman Ph. D.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ م مَّ عِلُّوْا لِّوَالِدَيْهِ ذِيْنَ آهْ وَآلِ ذِيْنَ آهْ وَآلِ ذِيْنَ آهْ هَلَّا ا  
II ( سورة المجادلة الآلية 11) (وَنَحْبِيْ عَمَلٌ هَلَّا بِيَمَاتُ وَوَدَّرَجَا صَدَقَ اَهْلُ الْعَلِيِّ الْعَظِيْمِ ( اَلِ رَفْعِ يَرْ ) 11

Summary Pain is defined as an unpleasant sensation that can be either acute or Chronic and is a  
consequence of complex neurochemical processes Diclofenac Is a nonsteroidal anti-inflammatory drug  
(NSAID). This Medicine works by reducing substances in the body that cause pain and Inflammation. Aim  
of the study To evaluate the analgesic effect of allium ampeloprasum seeds Extract on the adult male  
mice. In procedure we have 5 group of animals group 1 negative control received N.S group 2 received  
diclofenac group 3,4,5 receive Allium ampeloprasum seeds extract in different dose .. The result show  
that the diclofenac increase the tail flick latency which Indication that the analgesic effect of diclofenac  
drug. The allium ampeloprasum seeds extraction has no analgesic effect in The male mice . III Contents  
1. Introduction. 2. Materials and methods. 3. Statistical analysis. 4. Results. 5. Discussion. 6. Conclusion  
and Recommendations. 7. References. IV Introduction Pain is defined as an unpleasant sensation that  
can be either acute or chronic and is a consequence of complex neurochemical processes in the  
peripheral and central nervous systems (CNS). It is subjective, and the clinician must rely on the patient's  
perception and description of pain . Diclofenac Is a nonsteroidal anti-inflammatory drug (NSAID). This  
medicine works by reducing substances in the body that cause pain and inflammation. Diclofenac is used  
to treat mild to moderate pain, or signs and symptoms of osteoarthritis or rheumatoid arthritis. The  
usual dose is 75mg to 150mg a day, depending on what your doctor prescribes for you if you have  
history of allergic reaction to aspirin or NSAIDs, avoid diclofenac (non-steroidal anti-inflammatory  
drugs). Diclofenac can increase your risk of fatal heart attack or stroke, especially if you use it long term  
or take high doses, or if you have heart disease. Do not use this medicine just before or after heart  
bypass surgery (coronary artery bypass graft, or CABG). Diclofenac may also cause stomach or intestinal  
bleeding, which can be fatal The leek is a vegetable, a cultivar of Allium ampeloprasum, the broadleaf  
wild leek (syn. Allium porrum). The edible part of the plant is a bundle of leaf sheaths that is sometimes  
erroneously called a stem or stalk. The genus Allium also contains the onion, garlic, shallot, scallion,  
chive ,and Chinese onion. Three closely related vegetables, elephant garlic, kurrat and Persian leek or  
tareh, are also cultivars of A. ampeloprasum, although different in their uses as food Leeks are easy to  
grow from seed and tolerate standing in the field for an extended harvest, which takes place up to 6  
months from planting. The soil in which it is grown has to be loose and drained well; leek can be grown  
in the same regions where onions can be grown. Leeks usually reach maturity in the autumn months.  
Leeks can be bunched and harvested early when they are about the size of a finger or pencil, or they can  
be thinned and allowed to grow to a much larger mature size. Hilling leeks can produce better

specimens . Page 1 Raw leek (bulb and lower leaves) is 83% water, 14% carbohydrates, 1% protein, and contains negligible fat (table). A 100-gram (3+1/2 oz) reference amount supplies 255 kilojoules (61 kcal) of food energy, and is a rich source (20% or more of the Daily Value, DV) of vitamin K (45% DV) and manganese (23% DV). It is a moderate source (10-19% DV) of vitamin B6, folate, vitamin C, and iron. 1-2- Aim of the study: To evaluate the analgesic effect of allium amploprasum seeds extract on the adult male mice. 2-Materials and methods: 2-1-Preparation of plant extract: Fresh seeds of Allium amploprasum were obtained from local markets, in Babylon For preparation of extracts 100 gm dry powder of Allium amploprasum seeds was transferred in to the a filter paper extraction thimble and inserted in to soxhlet apparatus Water 250 ml was added in to the soxhlet flask and set the heater at 100 °C after about 3 hours the extract was let to be evaporated in the oven at 50 °C until there was no water in it and kept in a freezer. Figure 1: Allium ampeloprasum seeds extract after evaporation of the water

Page 2 2-2-tail flick test This test is used to evaluate the analgesic Effect o the drug. The tail of the mouse is immersed in hot water (50 °C) and the time is measured until the animal remove the tail from the water . 2-3-Experimental animal models Thirty male ,adult, Albino mice were enrolled in this research .Their weights were 19gm \_32gm .The rats were housed in the Animal House of college of medicine ,university of Babylon ,and kept on 25°C and 14h light and 10h dark cycle with water and food and libitum .After two week of adaptation ,the animals were randomly divided in to 5 groups ,6 mice for each group 2-4-procedure 1. Each mouse of group 1" Negative control" received N.S. in equal volume to the diclofenac, intraperitonially as a single dose. 2. Each mouse of group 2" Postive control" received diclofenac , 100 mg/kg , intraperitonially as a single dose. 3. Each mouse of group 3 received Allium ampeloprasum seeds extract , 500 mg/kg P.O. by gastric tube as single dose. 4. Each mouse of group 4 received Allium ampeloprasum seeds extract 1000 mg/kg P.O. by gastric tube as single dose. 5. Each mouse of group 5 received Allium ampeloprasum seeds extract 1500 mg/kg P.O. by gastric tube as single dose. Page 3 Figure 2: tail flick test 6. Thirty minutes after the drug administration , each mouse of group 1 and 2 was placed in the water bath for tail flick test 7. One hour after the drug administration, each mouse of group 3 and group 5 was placed bath for tail flick test. 2-5-Drugs: Diclofenac ampule (75 mg /3 ml) 2-6- statistical analysis The results were expressed as mean +/- standard error of the mean (SEM). Statistical analysis was carried out by using one way ANOVA. Different was considered statistically significant if the p value is lower than 0.05 statistical analysis was carried out by using 23th edition of SPSS statistics for windows. 3-Results The latency of tail flick in group 2 significantly increased (P0.05) in groups 3,4, and 5 as compared with group 1. (Figure:3) Figure3: Means of the latency of tail flick for all groups; group 1 (negative control group) and group 2 (diclofenac 100mg/kg), group 3 (Allium ampeloprasum seeds axtract 500 mg/kg), group 4 (Allium ampeloprasum Page 4 seeds axtract 1000 mg/kg), group 5 (Allium ampeloprasum seeds axtract 1500 mg/kg). (No. of mice= 6 for each group) ( \* ) significant difference (P