

5cc of oil in the wound after 5 days take sample from the wound to prepare slide for histopathology to see the process of wound healing, and after 10 day, 15 day & 20 day. in all these to see the stage of wound healing and repair of tissue.

Grossly : the injury of the skin appeared at 5 day its clear wound and without inflammation and contamination and taken after sample from 1cc and put in the 10% formalin for preparation of slide to see the healing process and suture the wound also at 10 day and 15 day and 20 day take the sample from wound in send for histopathology to see the process of healing at 15 day and 20 day there is completely healing and scar formation in the group which treated with (Gso) of 12 days and there is scar formation . the clinical examinations shoed simple redness and swelling were observed immediately after wounding with light elevation in temperature of wound area. These signs began to subside gradually during the 2 -3 days after wound in the grape seed oil group. While the wound in control group more swollen and warmer than first group and needed (4-5) days to subside . There is no infection in to grape seed oil treated Rabbits showed in the control Rabbits exudates. Figure (8) and systemic antibiotic and local antibiotic. The wound in the grape seed oil in Rabbits had completely healing in (10-12) days but these signs of haling in the control group where slower and demanded more than 4 weeks complete the healing .



(Figure 4)
Take sample of skin after (5) days



(Figure 5)
Take sample of skin after (10) days



(figure 6)
Take sample of skin after (15) days



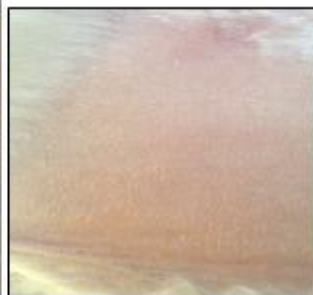
(Figure 7)
Take sample of skin after (20) days



(Figure 8)
The control not treated with grape seed oil take sample from control



(Figure 1) Cage of Animals



(Figure 2)
Clipping and Sheaving and Disinfectant



(Figure 3)
Incision of the wound and application of grape seed oil skin wound in Rabbit



(Figure 9)

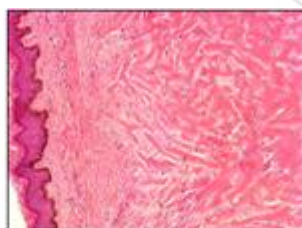
Showing wound healing after (5)days of used grape seed oil



(Figure 10)

Showing wound healing after (10) days of used grape seed oil

Histopathological finding : Treated group the microscopically picture of the wound area at five days post treated with grape seed oil showed collagen Fiber with mononuclear cells (Figure11) at the 5 days wounding the wound revealed large amount of granulation tissue formation with newly blood vessels (Figure12) . The section of skin wound reflected abundant regular collagen fiber the wound area at fifteen days post treatment (Figure13) while the histological picture in control group at(10) days after wound showed hemorrhage with inflammatory cell only cells infiltration with congested blood vessels . (Figure15) section at fifteen day post operation showed collagen fiber with aggregation of inflammatory cell (Figure14) .



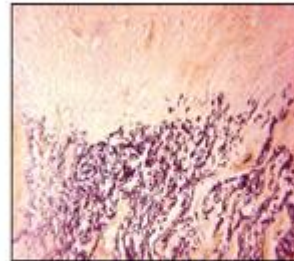
(Figure 11)

Infiltration of collagen fiber and infiltration of cell Neutrophil's .The beginning of formation of newly blood vessels after (5) day . . H & E 40



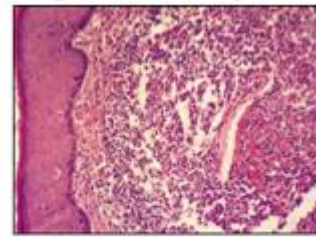
(Figure 12)

Infiltration of inflammatory mononuclear cell with formation of newly blood vessels .(angina genesis) after (10) days treat with grape seed oil H & E 40



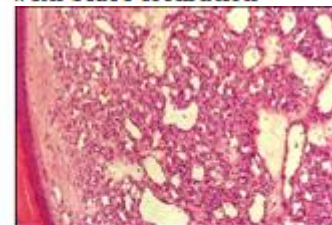
(Figure 13)

Infiltration mononuclear cell and infiltration of fibrous connective tissue (regular collagen fiber) after (15) days. H & E 40



(Figure 14)

Formation of fibrous connective tissue with scare formation



(Figure 15)

Control after(10) days formation of blood vessels with inflammatory cell

4. Discussion

The result of the present study show incremental effect on wound healing to grape seed oil treated group in compared to control group. The results of clinical observations were appeared that slight inflammation on the site of operation which was subsided in 2-3 days in grape seed oil. had anti inflammatory activity that rapidly reduces pain and edema. This agreed with authors (4) . According to our finding there was no infection , edema or exudates occurred in the grape seed oil group, which seems to support the results other studies (17) antibacterial agent and stimulated immune response with in a wound as well enhances wound healing (7) . In second group , two rabbit showed wound infection although it created under a septic infection. Other author (10) reported that grape seed oil has dehydrating effect due to hygroscopic from its

high . The present study indicated that the grape seed oil was very effective in wound healing because its achieved complete healing within 10-12 days and this lead to make the healing process in grape seed oil treated group much faster than control group . this agrees with other workers (10·11) that reports the grape seed oil has the ability to accelerated healing because of its direct effects on tissue and antibacterial properties which include decreases inflammatory edema attracts macrophages which cleanse the wound , provide a local cellular energy source , and protectively covers the wound histologically , the levels of healing process were the highest in the grape seed oil treated group on days 5,10 , 15 , 20 may indicate that grape seed oil in the inflammatory reaction in addition activated the synthesis and maturation of collagen fibers , this agreement with (14) other author (15· 16) refer to that the grape seed oil hastens wound healing by activation the release of inflammatory cytokines from surrounding tissue cells , mainly monocytes and macrophages as well as activation of endothelial cells and fibroblast the present study demonstrates (18) . the present study demonstrates that use of grape seed oil useful for treatment and accelerates healing of full thickness wounds of skin in Rabbits .

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