

Povidone iodine often used in incision treatment. This study was aimed to explain the differences between honey and povidone iodine 10% on incision healing, were unknown. This study used a true experiment design with 18 samples of 3 years old-male guinea pigs, divided into three groups. One-control group and 2 treatment groups. This classification was done randomize. The independent variable was used of honey and 10-% povidone iodine and the dependent variable was inflammation phase (squeezing, edema, plasma of incision) and proliferation (granulation, incision edge unification, skin structure) were assessed in the third and sixth days. Data were collected by using observation of the signs both of inflammation and proliferation phase and analyzed using Chi Square with level of significance $\alpha \leq 0.05$. Results showed that there was no significant difference in the third and sixth days inflammation. In contrast, a significant difference was obtained in the third and sixth days proliferation. Granulation ($p < 0,05$), incision edge unification ($p < 0,05$), establishment of skin structures ($p < 0,05$). It can be concluded that the honey usage was proven to be more effective in accelerated incision healing, increasing proliferation and reduce any infection risks. For future research there is needed to conduct a microscopically observation of numerous changes in collagen, PMN-cell (neutrophile) and MN-cell (lymphocyte and monocyte), inflammation and proliferation as well as incision healing process