A 14-Day Wound Healing Study in Mini-pigs

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This study aimed to evaluate the wound healing by creating different shapes of excision wounds in mini-pigs. Two shapes of wounds, circle wounds with a diameter of 3 cm and square wounds with a side of 2.5cm were created in one Lanyu 400 mini-pig and was observed for 14days. During the study period, no abnormal findings in daily clinical observation, food intake, or body weight change. Mild swelling was noted in one of the three circle wounds from Day 2 to Day 8, but not in square wound. Discharge secretion was found in all wounds from Day 3 to Day 5. All these findings were considered as part of the normal wound healing process. On Day 8 and Day 15, an average of 7% and 44% wound contraction in square wound and 0% and 42% in the circle were observed, respectively. These results indicated that the round excisions are likely to cause swelling and with the slightly slower rate of wound contraction than the square excisions.

Key words: wound healing, excisions, mini-pig