Histopathological evaluation of skin wound in rabbits treated by systemic dexamethasone

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Abstract

Healing of all damaged tissues including skin wounds have an identical pattern and depends on numerous intrinsic and extrinsic factors, one of these factors is cortisone hormone. The present study was designed to show the effect of dexamethasone on skin wound healing. Twelve rabbits were used, experimental group (7 rabbits) administrated 4 mg dexamethasone ten days prior to skin incision and control group (5 rabbits) had got skin incision. Biopsies were taken from two groups for histopathological evaluation. Control group shows proper wound healing includes epithelial growth migration that brought the wound edges to be close. Granulation tissue underneath the epithelium show to fill the incision gap represented by collagen fibers and fibroblast cells. The experimental group shows failure of epithelial wound edges to close and to be approximately in contact with absence of rete ridges. The main bulk tissue filled the incision gap is thick granulation tissue. Inflammatory cell with congested blood vessels can be detected. Prolonged use of dexamethasone or misuse of this drug impaired wound healing.

Keyword : light microscope, skin, healing, Dexamethasone

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