

The effect of CHONDROPROTEC® (a polysulfated glycosaminoglycan) on wound healing

Elizabeth A. Quigley, Robert Blumenstein, Boyce Jubilan, and Tracy Stoughton
DeSales University, Center Valley, Pennsylvania

Normal female mice were used to examine the effects of polysulfated glycosaminoglycans (GAG) on wound healing. The mice were given full thickness wounds on the dorsal surface. CHONDROPROTEC®, a commercially available polysulfated glycosaminoglycan was applied to the wounds until healing was complete. The area of the wounds was traced and used to determine the percent closure of the wound. Trend lines were used to evaluate the acceleration of wound healing, instead of relying on the flawed P values (fig 4). These trend lines show that the group treated with CHONDROPROTEC® healed at a faster rate than the group treated with saline. CHONDROPROTEC® was shown to be most effective in the earliest stages of the healing process – the granulation and wound contraction stages (Days 8, 10, and 14). This acceleration in wound closure is most likely due to the hydration and protection effects of the CHONDROPROTEC® on the granulation tissue and the epithelial cells. This is consistent with prior studies and supports information that polysulfated GAGs establish tissue in rats and rabbits. These results suggest that CHONDROPROTEC® is useful in the treatment of wound healing.