3rd International and 5th National Congress of

Wound and Tissue Repair

Held by Medical Laser Research Center, ACECR

سومین کنگره بین المللی و پنجمین کنگره ملی

زخم و ترمیم بافت

٤ تا ٦ مهرماه ١٣٩٧

تهران مرکز همایش های رازی

www.wtrc.ir

محورهای کنگره:

پوست ، طب داخلی ، جراحی

تکنولوژی های نوین در تشخیص ، پیشگیری، درمان

مهندسی بافت ، طب بازساختی، نانوتکنولوژی

علوم پایه ، سلولی - ملکولی

توانبخشی و پرستاری

Sept, 26-28th 2018

Razi Hall, Iran University of Medical Sceinces, Tehran, Iran

Scientific Secretrait: +98 21 66494649

Executive Secretrait: +98 21 44412437

دبیرخانه علمی: ۰۲۱ ۶۶۴۹۴۶۴۹

دبیرخانه اجرایی: ۰۲۱ ۴۴۴۱۲۴۳۷

The Contents:

Dermatology, Internal Medicine, Surgery

New Technologies, (Diagnosis, Prevention, Treatment)

Tissue Engineering, Regenerative Medicine, NanoTechnology

Basic Sciences, Cellular - Molecular Sciences

Rehabiliation and Nursing

پژوهشکدهٔ فن آوری های زخم و ترمیم بافت جهاد دانشگاهی

مرکز تحقیقات لیزر در پزشکی جهاد دانشگاهی واحد علوم پزشکی تهران

(63.2%) were among the major barriers identified in the study.

Conclusion: Knowledge and practice of the nurses regarding prevention of pressure ulcer was found to be inadequate. Having higher educational status, attending formal training and being experienced were positively associated with knowledge; while shortage of facilities and equipments, Heavy workload, inadequate training and inadequate staff number showed negative association with practice of nurse›s pressure ulcer prevention. In-service training and upgrading courses are some of the important steps to improve nurses› knowledge and practice on prevention of ulcer pressure.

Keywords: Pressure Ulcer, Nurse, Knowledge, Practice, Prevention

Histological Study of the Effect of Bovine Vitreous Humor on Accelerating Wound Healing in Healthy Wistar Rats

Rastgoo Narjes*, Lari Roya, Fereidoni Masoud

MSc, Student of Biology, Faculty of Science, Ferdowsi University of Mashhad, Mashhad, Iran

Skin is the largest organ, covering the body. As a result, it is more susceptible to damages compared to other organs. In recent years, there has been increased interest in the use of animal tissues and cell products for treating wounds. Bovine vitreous humor is a gel rich in collagen and hyaluronic acid that is a slaughterhouse waste, and can be a good candidate for the production of biological dressings.

Objective: Production of biological dressings from bovine vitreous humor.

Hypothesis: Bovine vitreous humor accelerates the process of wound healing.

Method: The cow's eye was opened from the cornea and sections were taken separately from the central and posterior parts of the vitreous humor. In this study, we used male rats of the Wistar strain weighing between 200 and 250 g. Three wounds 6 mm in diameter were created on the back of each rat. One wound was treated with povidone iodine (BETADINE®) and the other two wounds were treated separately with the posterior and middle sections of the vitreous humor. On days 1, 3, 5, 8, and 14 after treatment, tissue samples were taken from the wounds. After fixing, sectioning, mounting on slides, and staining, the sections were photographed and were subjected to statistical analysis using the ImageJ software.

Results: In microscopic analysis, the treatment and control groups were compared on the first, third, fifth, eighth, and fourteenth days for inflammatory cell density, angiogenesis, epithelium thickness, development of granulation tissue, and presence of hair follicles. There was no statistically significant difference between the treatment and control groups on the first and third days. On the fifth day, density of inflammatory cells was higher in the treatment group compared to the control group. Epithelium was thicker and blood vessels, granulation tissue, and hair follicles were more developed. On the eighth day, epithelium thickness, number of inflammatory cells, and development of blood vessels were higher in the wounds treated with central vitreous humor compared to the control group or the wounds treated with posterior vitreous humor. On the fourteenth day, epithelium thickness, number of inflammatory cells, and development of blood vessels were higher in the control group compared to the treatment groups.

Conclusion: Bovine vitreous humor has no significant effect on wound healing.

Keywords: Bovine Vitreous Humor, Wound Healing, Biological Dressings