



mitogen-activated protein (MAP) kinases, a group of which are the JNK proteins (JNK1, 2 and 3). The present work studied the implication of the JNK pathway in regulating fibroblast motility, capacity to contract mechanically unloaded collagen gels and expression of type I collagen. The study has been carried out in primary human dermal fibroblasts, in mouse embryo fibroblasts (wild type and *jnk*^{-/-}) and in fibroblasts expressing mutated, and thus inactive, c-Jun (a phosphorylation substrate protein of JNK). *jnk*^{-/-} fibroblasts or fibroblasts mutated for c-Jun, and human dermal fibroblasts in which JNK is being pharmacologically inhibited, display impaired wound closure capacity due to reduced migratory activity and altered contractility. Discrete molecular mechanisms were identified that directly implicate the transcription factors c-Jun and JunB to control these cellular responses. Together, this study clearly shows the importance of the JNK pathway for the function of fibroblasts in the process of tissue repair, involving cell migration, matrix contraction and collagen biosynthesis (Javelaud et al., JBC 2003).

ΠΑΡΑΣΚΕΥΗ 16 ΜΑΡΤΙΟΥ 2007

ΑΙΘΟΥΣΑ: «ΑΜΦΙΘΕΑΤΡΟ»

ΩΡΑ: 11.30-12.00

ΣΥΝΤΟΝΙΣΤΗΣ: ΧΡΗΣΤΑΚΗΣ ΧΡΗΣΤΟΣ

“MULTI- DISCIPLINARY/PROFESSIONAL APPROACHES IN WOUND HEALING. THE DANISH EXPERIENCE”

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Objective: To improve prophylaxis and treatment of patients with all types of problem wounds. This is achieved during establishment of a multi-professional organisation in the primary as well as in the secondary health care sector.

Methods: Establish a multi-professional organisation in the health care sector consisting of hospital centres and smaller units in the primary health care sector. Collaboration models between the hospital and community sector should be developed and standardised treatment protocols and patient guidelines should be carried out. Evidence for improved quality of treatment and care and a standardised educational program for all involved types of staff should be accomplished.

Results: This type of model has been established in Denmark. Clinically the organisational model consist of two hospitals units with own staff and in-beds: Copenhagen Wound Healing Center started in 1996 and The University Center of Wound Healing started in 2003.

The referral policy has been simplified and centralised. Treatment plans including diagnostics, treatment and prevention have been optimised. Different types of educational services, basic and clinical research and prevention programs have been established. Collaboration models for relationship between the

hospital and community sectors are presently discussed.

A national education program of 6 months has been developed for nurses. Education of medical doctor to become experts in wound healing (2 years) has been achieved by the establishment of a national accepted expert area called “Clinical Wound Healing”.

Evidences based research will in the future be achieved using wound databases including socio-economical data. In Denmark a PC database primarily for patients with diabetic foot ulcers has been developed. This database is primarily for hospital use, but presently a program for pocket PC's used in the primary health care sector is under development.

Conclusion: The optimal way to deliver wound care in both the hospital- and community sector is still under evaluation. Development of organisational models including databases, systemic evaluation of quality of care and outcome measures may in the future give us the ideal and optimal method of organisation of wound care delivering. An advanced organisational model from Denmark is demonstrated.

Gottrup F et al. A new concept of a multidisciplinary wound healing center and a national expert function of wound healing. Arch Surg. 2001;136:765-72

Gottrup F. Optimizing wound treatment through health care structuring and professional education. Wound Rep Reg 2004; 12:129-133

Gottrup F. A specialised wound healing center concept: importance of a multidisciplinary department structure and surgical treatment facilities in the treatment of chronic wounds. Am J Surg 2004; 187:38-43S

Gottrup F. Management of the Diabetic Foot: Surgical and Organisational Aspects. Horm Metab Res, 2005;37, Supplement 1:69-75

ΑΙΘΟΥΣΑ: «ΑΜΦΙΘΕΑΤΡΟ»

ΩΡΑ: 12.00-12.30

ΣΥΝΤΟΝΙΣΤΗΣ: ΤΣΟΥΤΣΟΣ ΔΗΜΟΣΘΕΝΗΣ

“EFFECT OF SILVER ON BURN WOUND INFECTION CONTROL AND HEALING: REVIEW OF THE LITERATURE”

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Silver compounds have been exploited for their medicinal properties for centuries. At present, silver is reemerging as a viable treatment option for infections encountered in burns, open wounds, and chronic ulcers. The gold standard in topical burn treatment is silver sulfadiazine (Ag-SD), a useful antibacterial agent for burn wound treatment. Recent findings, however, indicate that the compound delays the wound healing process and that silver may have serious cytotoxic activity on various host cells. The present review aims at examining all available evidence about effects, often contradictory, of silver on wound infection control and on wound healing trying to determine the practical therapeutic balance between antimicrobial activity and cellular toxicity. The ultimate goal remains the choice of a



product with a superior profile of infection control over host cell cytotoxicity.

ΣΑΒΒΑΤΟ 17 ΜΑΡΤΙΟΥ 2007

ΑΙΘΟΥΣΑ: «ΑΜΦΙΘΕΑΤΡΟ»

ΩΡΑ: 10.00-10.30

ΣΥΝΤΟΝΙΣΤΗΣ: ΚΑΚΑΓΙΑ ΔΕΣΠΟΙΝΑ

TOXIC EPIDERMAL NECROLYSIS – APPROACHES TO WOUND MANAGEMENT

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Toxic Epidermal Necrolysis (TEN) is a rare epithelial exfoliating disorder associated with a high mortality. Patients are best looked after by a multi-disciplinary team based in a Burns Centre because of the similarity of TEN to large Total Body Surface Area (TBSA) superficial partial thickness burns. A Burns Centre is also appropriate because of the availability of a thermo-regulated environment and nurses familiar with large TBSA dressings. Predicted mortality can be estimated using the SCORTEN criteria.

The general management of patients with TEN includes intravenous immunoglobulins, cyclosporin, and granulocyte-colony stimulating factor along with supportive treatment including ventilation, nutrition, hydration and analgesia. Although spontaneous re-epithelialisation can be expected, it is important to protect the exposed dermis from infection and desiccation. Choice of dressing is made on an individual basis and includes biosynthetic dressings such as Biobrane, skin substitutes such as human cadaveric allograft and porcine xenograft, and simple dressings such as paraffin gauze and mepitel. Topical steroids to intact skin may prevent progression. Three cases will be presented to illustrate the wound management algorithm of the Chelsea and Westminster Burn Service for treating patients with TEN.