AN EVALUATION OF POLYMERIC MEMBRANE FINGER/TOE DRESSING FOR 12 PATIENTS PRESENTING AT A MINOR INJURIES UNIT

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E-poster session: Acute Wounds

Aim:

- If the finger/toe dressing as a single agent is effective in the management of surgical nail evulsions and/or trauma injuries to the hand or foot
- If healing time and hand function is perceived to be in line with or better than current practice
- Patient perspective including performance, reduction in pain and function (QOL)
- Clinicians perspective of dressings and protocol for selecting finger/toe dressings

Method: Patients were recruited with informed written consent, presenting with trauma injuries fingers or toes, or minor hand or toe surgery. Patients were enrolled for a maximum period of 4 weeks or until healed. Patients completed a diary which included numerical pain scores, analgesia, dressing performance.

Results / Discussion: Wound types: n3 Paronychia, n2 lacerations, n1, burns, n1 dog bites, n3 trauma and n2 nail avulsion, n6/(50%) of patients presented within 12 hours, of injury or trauma, n3 (20%) patients with paronychia all presented after 24 hours up to a maximum of three days. At 2 weeks n5 (42%) patients had completely healed, n3 (20%) patients were discharged from the minor injuries unit as they could manage the dressings independently, 1 (8%) lost to follow up. n8 (67%) recorded a reduction in pain. Dressing performance n9 (75%) patients and all clinicians rated the dressing as good and very good.

Conclusion: During this evaluation the majority n9 (75%) of patients had either healed, or discharged to change dressings at home which reduced minor injury appointments freeing up valuable time for both patients and staff.
Aim: To evaluate the results of treatment in 86 patients with extensive wound and ulcer.

Method: 86 cases of simultaneous transplantation of split is not perforated skin flaps on extensive wound and ulcer defects, a total area of 500 to 1830 cm². The average area of wound defect was 706 cm². Genesis wound defects: Traumatic wounds 18 (20.9%) after surgical treatment of necrotic foci 49 (57.0%), chronic wounds 19 (22.1%). Localization wound defects trunk, 3 (3.5%), the head 3 (3.5%), upper extremity 8 (9.3%), lower limb 72 (83.7%). Features of the operation: The donor graft in relation to the size of the wound defect 1: 1, the thickness of a skin graft of 0.4 - 0.6 mm, the complete removal of granulation tissue full adaptation edges split skin graft to the wound edge defect, an additional compression of the skin flap.

Results / Discussion: Complete healing of the flap achieved in 79 (91.7%). In 7 (8.3%) patients had a skin graft rejection break down of up to 20%. Complete epithelialization of the wound defect in the immediate postoperative period was observed in 93%, in the remote period at 89%, with no recurrence of the wound defect.

Conclusion: Transplanting is not perforated split skin graft on extensive wound defects reduces complications, rapid and complete epithelialization of the wound defect, a more lasting scar reduction in the length of hospitalization of 7.2 days and rehabilitation, improved cosmetic results.
Aim: Describe the healing process of acute wounds for which was used an absorbent lipido-colloid foam dressing* with adhesive border and the change in the quality of life of the patients.

Method: Prospective observational study conducted in daily surgery practice in wounds for which surgeons used the studied wound dressing. Patients were followed up after 1 week, 2 weeks and one month.

Results / Discussion: The study covered 67 patients aged 44 years old among whom 61.9% were male. Their wounds had an average surface of 5.6cm2, were subject to moderate or severe exudate for 34.4% of them and 34.4% to moderate to severe pain. The dressing was prescribed for an average period of 2.1 weeks with a change every 2.5 days. The healed area was of 64.3% at the 1st week, of 79.3% at the 2nd week and of 88.4% after one month. The percentages of totally healed wounds were respectively of 20.0%, 30.9% and 49.1%. Among surgeons, 96.0% feel good or very good the overall performance of the dressing and 80.0% will often or very often continue to use it. On scales from 0 (not agree at all) to 5 (strongly agree), surgeons estimate to 4.2 the ease of application of the dressing, 4.8 its drainage efficacy, 4.9 its non-adherence to the wound, 4.8 its preservation of the edges and 4.8 the absence of pain when removal.

Conclusion: The dressing effectively contributes to a fast healing of surgical wounds and to improve the quality of life of the patients.

* Urgo Medical; Urgotul Border
Aim: Evaluation of clinical efficacy of keratinocyte-based polymer film patch* plus best practice clinical care in subjects with burn injuries with particular regard to: 1) Wound healing (complete reepithelialization), 2) the patient's pain. In the context of the study will be collected secondary outcomes related to type of lesion and its clinical evolution through the analysis of the items in the scale of the PSST.

Method: This study consists of a phase III randomised open trial between two parallel groups. The product to be analysed belonging to the advanced dressing category, will be compared with normal dressing treatment according to the practice typically applied in the research centre. The traditional dressing consists of cotton gauze, ointments and a non-occlusive plaster.

Primary Outcome Measures: Wound healing and significant reduction in pain.

Secondary Outcome Measures: Clinical evaluation of the lesion scores for each visit, the presence / absence of infection for each visit.

Results / Discussion:

- Enrollment was closed on October 31st. We enrolled 110 patients
- It is currently being analyzed results
- Preliminary analysis showed a significant reduction in pain

Conclusion:

- Other results will be presented in the poster
- ClinicalTrials.gov Identifier: NCT01499264

*MySkin® Patch
[EP030] TAKE CARE IN THE EMERGENCY TRAUMATIC WOUNDS

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E-poster session: Acute Wounds

**Aim:** When we talk about urgency and emergency, a high number of calls comes in the wake of injuries of different severity.

Traumatic wounds are internal or external injuries, caused by factors such as accidents, explosions, burns, bites, cold arms or fire, or tissue loss. To be classified as to the size of the wound, cavity and fractured existence, achievement of vital structure, presence of foreign matter and require urgent assistance standardized protocols. This work aims to identify the existence of guidelines of action vis-à-vis the patient with traumatic wound.

**Method:** Was held, through the EBSCO host, a search in scientific databases of 1 to 10 October 2014, using descriptors Emergency and Traumatic Wounds which resulted in 89 articles. Of these, 6 were analyzed.

**Results / Discussion:** The care of wounds in emergency involves the examination and protection, abundant lavage and debridement to avoid infection. Fluid drainage is critical.

The patient’s response to pain can cause immunodeficiency, or induce hypermetabolic, which can result in poor healing and should be administered analgesia. The closure of the wound is only held when removed the devitalized tissue and there is adequate skin.

Scientific data show that 70\% of emergency injuries present infection enhancers organisms and the time between the injury and the service, resulting in the possibility of multiplication of these organisms.

**Conclusion:** Reduce the time of the first meeting less than 6 hours proves to be more efficient than antibiotics preventively. Immediate care in urgency and application of appropriate dressing every kind of injury contribute to the formation of granulation tissue and scarring. Also the accompaniment by a multidisciplinary team increases the treatment success.
Aim: Wound healing is a complex and dynamic process, with a complex cascade of events starts from the movement of injury and can continue for varying period of time depends on the extent of healing. Collagen belongs to the family of structural protein present in a variety of animal tissue including skin, bone and tendon. Collagen is an important glycoprotein of extracellular matrix and plays a key role in wound healing. In this study, we have explored the efficacy of topical administration of collagen on healing of cutaneous wounds.

Method: 2cm² open excision wounds were made on the back of rats. 200µl of the collagen (200mg/kg body weight) was applied topically once daily for treated wound whereas the control wound was treated with 200µl of PBS. The granulation tissues formed were removed and levels of DNA, protein, collagen and lipid peroxide were estimated. Histological evaluation was also carried out. The rate of contraction and epithelialization period was also measured.

Results / Discussion: Wounds treated with collagen healed much faster than control wounds. The biochemical parameters like total protein, DNA, collagen and hexosamine were also observed to be increased in the granulation tissues of collagen treated rats as compared to controls. Rate of contraction was found to be significantly increased whereas epithelialization period was remarkably reduced.

Conclusion: These results clearly reiterate that the topical application of collagen enhances the rate of healing.
Acute care of hand/tendon/fingertip injuries consists of surgery, debridement, reconstruction and prevention of infections. Crucial in all cases is to maintain function.

**Aim:** Evaluate a new finger dressing* on acute finger injuries in regards to healing, pain, infection and ease of use.

**Method:** Nine patients with moderately exuding injuries were included. The wounds were treated with antibiotic ointment and Vaseline gauze for 5 days prior to applying a finger dressing*. Hand bathing every other day was recommended to patients with severely soiled hands. Dressings changed by the patient every 4 days and weekly monitoring at the clinic.

**Results / Discussion:** The finger dressing* was easy to apply and change, and was non-adherent to the wound. The wounds rapidly became cleaner which helped promote wound healing. The result was a fast forming granulation tissue. Most wounds healed within 4 weeks. Swelling of the fingers decreased. The patients found it comfortable and easy to change and all reported pain relief. The close fit and shape of the dressing increased the mobility and protected the fingertips from impact.

**Conclusion:** For the past three years a reasonable experience had been build up with the use of a finger dressing*. We experience faster healing and less pain. With amputations the shape of the dressing promotes a rounded healing of the tip. A finger dressing* can also be used in combination with splinting. The only disadvantage of the finger dressing* was when the injuries were very wet as it necessitated frequent changes of the dressing to prevent maceration.

*Polymeric membrane finger dressing (PMFD)
Aim: Radiotherapy is a standard oncological treatment with several side effects. The most recent literature reports that, despite the technological advances, the 85% of the patients treated with radiotherapy develops skin inflammations.

The severity of skin inflammations depends on:

- Skin texture
- Number and dose of radiation
- Location, size and number of treated areas
- Body reaction

Side effects could appear immediately after the first treatment and at times disappear quickly. However, sometime the seriousness of skin inflammation forces the clinician to suspend the radiotherapy treatment. Patients present radio dermatitis with erythema, edema, vesicles, blisters or erosions that can spread over the irradiated area; severe cases could be characterized by tissue necrosis.

Method: 24 patients under radiotherapy (3 stomach lesions, 10 breast lesions, 11 head / neck lesions) have been treated with a specific gel whose active ingredients (vesicular microstructure containing Hyaluronic Acid, N-acitilcarnitina and Allantoin) provide hydration, protection and skin cell regeneration.

Results / Discussion: Since the first application patients report a drastic pain reduction and an increase of the re-epithelialization speed. In 7 patients the clinician has not been forced to suspend the radio therapy treatment.

Conclusion: This product reduces burning sensation and pain, also it increase the speed of re-epithelialization. After those positive results, the product is now used before the radio therapy treatment as a preventive measure. Patients apply this gel both immediately before and after the treatment. Initial results are very positive.
A CLINICAL TRIAL OF A KERATIN GEL TO ACCELERATE HEALING AND IMPROVE COMFORT POST HAEMORRHOIDECTOMY

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Aim: The aim of this pilot study was to trial a keratin gel* to determine if it could heal lesions resulting from haemorrhoidectomy faster than Standard Care and reduce discomfort for patients.

Method: Patients were invited to enrol post haemorrhoidectomy at our clinic, patients with tags/growths near the wound site or any infection were excluded. Standard Care was to use a chamomile sitz bath twice daily until healed. For treatment, patients also used this Standard Care and additionally applied the keratin gel after drying after the sitz bath. Photographic assessments were made of wound size and healing rate and questionnaires used to measure levels of discomfort.

Results / Discussion: Ten patients were enrolled to treatment, none were excluded. Subsequent to these enrolments, 5 patients using Standard Care only were assessed for comparison. One of the treated patients discontinued due to discomfort, this patient was exceptionally obese and his subsequent healing rate was well below average. The other 9 treated patients found the treatment tolerable. The average healing rate for the treated patients was 4 weeks compared to 6 weeks for the Standard Care. The level of discomfort was assessed to be lower for the treated patients.

Conclusion: This pilot study suggests that the keratin gel can improve healing times and reduce discomfort post haemorrhoidectomy. These improvements suggest that use of this gel may be worthwhile and beneficial.

*keragel® by Keraplast