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1. Title: A Pilot Study on the Effectiveness of Platelet-Rich Plasma and Debridement for the Treatment of Nonhealing Fistulas in Spinal Cord-Injured Patients
Author(s): Biglari, Bahram, Reitzel, Tim, Swing, Tyler, Büchler, Axel, Gerner, Hans Jürgen, Schmidmaier, Gerhard, Moghaddam, Arash
Abstract: Here, Biglari et al determine the effectiveness of platelet-rich plasma (PRP) in the treatment of nonhealing fistula in spinal cord-injured patients. After 1 week of treatment with PRP, the authors observed low levels of secretion from the fistulas. After 2 weeks, they noted no further secretion from the fistulas. A magnetic resonance imaging control investigation after 3 weeks showed the complete disappearance of the fistulas. No negative effects and no allergic reactions were noted in the use of PRP. The results suggest that the application of PRP in combination with debridement is an effective therapy option and good alternative to recurrent surgical interventions for treating nonhealing fistulas resulting from the surgical closure of PrUs. [PUBLICATION] 29 references
Source: BNI

2. Title: A new quality of life consultation template for patients with venous leg ulceration
Author(s): Green, J., Jester, R., McKinley, R., Pooler, A., Mason, S., Redsell, S.
Abstract: Objective: Chronic venous leg ulcers (CVLUs) are common and recurrent, however, care for patients predominantly has a focus which overlooks the impact of the condition on quality of life. The aim of this study was to develop a simple, evidence-based consultation template, with patients and practitioners, which focuses consultations on quality of life themes. Method: A nominal group was undertaken to develop a new consultation template for patients with CVLUs based on the findings of earlier qualitative study phases. Results: A user-friendly two-sided A4 template was designed to focus nurse-patient consultations on the quality of life challenges posed by CVLUs. Conclusion: CVLUs impact negatively on the quality of life of the patient but this receives inadequate attention during current consultations. This new template will help to ensure that key concerns are effectively raised, explored and addressed during each consultation. [PUBLICATION] 42 references
Source: BNI
Full text: Available Mark Allen Group at Journal of Wound Care

3. Title: A novel in vitro wound biofilm model used to evaluate low-frequency ultrasonic-assisted wound debridement
Author(s): Crane, S., Garde, C., Bjarnsholt, T., Alhede, M.
Abstract: Objective: Bacterial biofilms remain difficult to treat. The biofilm mode of growth enables bacteria to survive antibiotic treatment and the inflammatory reaction. Low-frequency ultrasound has recently been shown to improve healing in a variety of settings. It is hypothesised that ultrasound disrupts the biofilm leaving bacteria more vulnerable to anti-septic or antibiotic treatment. The objective of this study is to develop a realistic model to elucidate the effect of ultrasound on biofilms. Method: A novel in vitro wound biofilm model was developed. Biofilms of Staphylococcus aureus were casted in a semi-solid agar gel composed of either tryptic soy broth (TSB) or a wound simulating media (WSM; composed of Bolton broth with blood and plasma), to resemble the non-surface attached aggregates. The model was used to evaluate the antibiofilm effect of an ultrasonic-assisted wound debridement device (UAW) in the presence of saline irrigation and treatment with a polyhexamethylene biguanide (PHMB)-containing anti-septic. Confocal microscopy was used to evaluate the effect of treatments on biofilm disruption and cell viability counting measured the antibacterial effects. Results: Confocal microscopy showed that application of 10 seconds of moderate-intensity UAW could effectively disrupt semi-solid biofilms grown on both media settings. This treatment only had a small effect on the cell viability. A 24-hour treatment with PHMB was able to reduce the number of bacteria but not eradicate the biofilm in both media settings. Interestingly, the efficacy of the PHMB anti-septic was significantly higher when applied on biofilms grown in the...
more complex WSM media. However, we found a significant improvement in reducing the number of viable bacteria grown on both media when applying UAW before administration of the PHMB solution. Applying UAW in the presence of PHMB further improved the efficacy. Conclusion: Using a realistic in vitro biofilm wound model, we show combining UAW with a PHMB-containing antiseptic has potential as an antibiofilm strategy in wound care. [PUBLICATION] 45 references

Source: BNI

Full text: Available Mark Allen Group at Journal of Wound Care

4. Title: A portable, disposable system for negative-pressure wound therapy
Citation: British Journal of Nursing, Jan 2015, vol. 24, no. 2, p. 98-106, 0966-0461 (January 22, 2015)

Author(s): Brandon, Tanya

Abstract: Negative-pressure wound therapy (NPWT) imparts a number of clinical effects that promote a healing response and, as such, is a well-established means of treating a variety of wound types. Historically, the technique has been primarily used in the hospital setting; however, the introduction of more portable devices has led to an increase in the use of NPWT in the home care setting, thereby facilitating early discharge of patients from hospital and continuity of care in the community. Portable NPWT devices also have the potential to impact positively on patients' quality of life, allowing increased mobility and freedom to undertake normal activities of daily living. Following the development of its standard Avarice® NPWT system and associated dressing kits, Molnlycke Health Care (Gothenburg, Sweden) has introduced a single-patient-use, disposable NPWT system; Avance Solo. This has been developed with a view to maximising patient freedom and mobility, providing a single-patient-use NPWT solution for multi-week treatment to allow quick and easy discharge of patients from hospital to home, and reducing some of the challenges of logistics and administration associated with the provision of NPWT for the caregiver. As with the standard NPWT system, the single-patient use system is supplied with a number of products incorporating Safetac® adhesive technology to minimise the risk of patients suffering unnecessary pain and trauma associated with dressing changes. This article presents a series of case studies describing procedures and outcomes following the application of the Avance Solo single-patient-use system. [PUBLICATION] 56 references

Source: BNI

Full text: Available British journal of nursing (Mark Allen Publishing) at British Journal of Nursing

5. Title: A prospective, longitudinal, descriptive study of the effect of a customized wheelchair cushion on clinical variables, satisfaction, and functionality among patients with spinal cord injury
Citation: Ostomy - Wound Management, Feb 2015, vol. 61, no. 2, p. 26-36, 0889-5899 (February 2015)

Author(s): Vilchis-Aranguren, Rodrigo, Gayol-Mérida, Diana, Quinzaños-Fresnedo, Jimena, Pérez-Zavalda, Ramiro, Galíndez-Novoa, Carmen

Abstract: The Instituto Nacional de Rehabilitacion (Rehabilitation National Institute) (INR) developed a prototype wheelchair cushion (INR cushion) designed to adjust to the anthropometry of the user's ischiogluteal area and prevent pressure ulcer formation while maintaining or promoting functionality. A prospective, longitudinal, descriptive study was conducted from February 2010 to February 2011 to evaluate the effect of using the INR cushion on clinical variables, functionality, and user satisfaction. Sixteen patients were recruited (9 male, 7 female, average age 31.8 [range 22-47] years, average body mass index 25 [range 22-34], average time in wheelchair 10.1 [range 3-26] years) who met the study protocol inclusion criteria of being pressure ulcer-free for at least 6 months and capable of propulsion and transfer without assistance, chronic spinal cord injury (2 years), and without chronic-degenerative diseases or cognitive problems. Each participant received the cushion for a 2-month evaluation. Eight clinical variables were assessed: trunk control, posture, spasticity, transfer capacity, comfort, skin reaction, propulsion capacity, and pressure release capacity. The clinical assessment was performed using validated scales and instruments: Modified Ashworth Scale (MAS), Functional Independence Measure(TM) (FIM), Norton Scale, and assessment of skin reaction. Interface pressures were measured using force sensing array, and participants completed a structured interview to assess user expectation, perceived functionality, perceived quality, and likelihood of recommending the device. Two patients withdrew due to appointment conflicts; of the remaining 14, significant differences between the user's experience with other products and the INR were found with regard to pressure redistribution (P = 0.012); all participants but 1 graded the INR as good in all interview categories. No participants developed a pressure ulcer during the study. The customized cushion was especially functional among patients with incomplete thoracic and cervical injuries, high FIM scores, and moderate levels of activities of daily living. Taller patients (P = 0.01) and patients with higher degrees of spasticity (P = 0.007) were less satisfied with functionality. The results of this study contributed to the redesign process of the cushion. These findings may be useful to establish predictors, both subjective and clinical, for patient utilization of wheelchair cushion use. [Publication] 30 references

Source: BNI

6. Title: A prospective, randomized, controlled trial comparing the effects of noncontact, low-frequency ultrasound to standard care in healing venous leg ulcers
Citation: Ostomy - Wound Management, Jan 2015, vol. 61, no. 1, p. 16-29, 0889-5899 (January 2015)

Author(s): Gibbons, Gary W, Orgill, Dennis P, Serena, Thomas E, Novoung, Aksone, O'Connell, Jessica B, Li, William W,
Abstract: Current scientific evidence suggests venous leg ulcers (VLUs) that do not respond to guideline-defined care may have a wound microenvironment that is out of physiological balance. A prospective, randomized, controlled, multicenter trial was conducted to compare percent wound size reduction, proportions healed, pain, and quality-of-life (QOL) outcomes in patients randomized to standard care (SC) alone or SC and 40 kHz noncontact, low-frequency ultrasound (NLFU) treatments 3 times per week for 4 weeks. One hundred, twelve (112) eligible participants with documented venous stasis, a VLU 30 days' duration, measuring 4 cm... to 50 cm..., and demonstrated arterial flow were enrolled. Of these, 81 reduced 30% in size during the 2-week run-in study phase and were randomized (SC, n = 40; NLFU+SC, n = 41). Median age of participants was 59 years; 83% had multiple complex comorbidities. Index ulcers were 56% recurrent, with a median duration of 10.3 months (range 1 month to 204.5 months) and median ulcer area of 11.0 cm... (range 3.7 cm2-41.3 cm...). All participants received protocol-defined SC compression (30-40 mm Hg), dressings to promote a moist wound environment, and sharp debridement at the bedside for a minimum of 1 time per week. Ulcer measurements were obtained weekly using digital planimetry. Pain and QOL scores were assessed at baseline and after 4 weeks of treatment using the Visual Analog Scale and the Short Form-36 Health Survey. After 4 weeks of treatment, average wound size reduction was 61.6% ± 28.9 in the NLFU+SC compared to 45% ± 32.5 in the SC group (P = 0.02). Reductions in median (65.7% versus 44.4%, P = 0.02) and absolute wound area (9.0 cm... versus 4.1 cm...), P = 0.003) as well as pain scores (from 3.0 to 0.6 versus 3.0 to 2.4, P = 0.01) were also significant. NLFU therapy with guideline-defined standard VLU care should be considered for healing VLUs not responding to SC alone. The results of this study warrant further research on barriers to healing and the changes occurring in the tissue of the wound to explore theories that the microenvironment impacts wounds that do not heal despite provision of guideline-defined care. (ProQuest: ... denotes formulae/symbols omitted.)

Source: BNI

Citation: Journal of Wound Care, Jan 2015, vol. 24, no. 1, p. 11-22, 0969-0700 (January 2015)

Author(s): Walker, M., Metcalf, D., Parsons, D., Bowler, P.

Abstract: Objective: To assess the effectiveness of a new, next-generation antimicrobial dressing (AQUACEL Ag+ dressing) in facilitating healing in a variety of hard-to-heal wounds that may have been compromised by infection and/or biofilm.

Method: This was an international, multi-centred, real-life, non-randomised evaluation involving patients with a wide variety of slow-, non-healing or deteriorating chronic and acute wounds. There were no strict inclusion or exclusion criteria and the clinicians were asked to use their discretion in the selection of patients. The clinicians continued to use their standard protocol of care but replaced their existing primary wound-contact dressing with the next-generation antimicrobial dressing (NGAD) for up to 4 weeks. Clinicians could extend the treatment period if this was deemed clinically appropriate. Baseline assessments included wound bed characteristics, exudate level, indicators of wound biofilm, and signs and symptoms of infection. At the final assessment, the investigators reported the wound size, wound bed characteristics, and exudate level. Results: A total of 121 patients were recruited into the original evaluation, of which eight were excluded for incomplete data sets. Most wounds (73; 64%) were either venous leg ulcers (59; 52%) or diabetic foot ulcers (14; 12%). At baseline, the wounds of (26; 23%) patients were slowly improving, 65 were stagnant (58%) and 22 (19%) were deteriorating. Just under three-quarters (74%) of the wounds had suspected biofilm (criteria including failure of a wound to heal, lack of response to topical and systemic antimicrobial agents, or the presence of slimy substances on the wound surface). Following the evaluations, the average wound closure achieved for all wounds was 72.6%, 19 (17%) wounds healed, 47 (42%) achieved at least 90% wound closure, and 71 (63%) achieved at least 75% closure. The average treatment period was 4.1 weeks; 35 wounds were treated with the dressing for more than 4 weeks. Cost analysis indicated that potential antimicrobial dressing cost reductions of approximately 30% were realised using the NGAD. Conclusion: This real-life, non-randomised evaluation provides encouraging evidence that the NGAD may have a role to play in facilitating wound progression towards healing by helping to eliminate the biofilm barrier. [PUBLICATION] 45 references

Source: BNI

Full text: Available Mark Allen Group at Journal of Wound Care

8. Title: A systematic review of economic evaluations assessing interventions aimed at preventing or treating pressure ulcers

Citation: International Journal of Nursing Studies, Mar 2015, vol. 52, no. 3, p. 769-788, 0020-7489 (March 2015)

Author(s): Palfreyman, Simon J, Stone, Patricia W

Abstract: Pressure ulcers have an adverse impact on patients and also result in additional costs and workload for healthcare providers. Interventions to prevent pressure ulcers are focused on identifying at risk patients and using systems such as mattresses and turning to relieve pressure. Treatments for pressure ulcers are directed towards promoting wound healing and symptom relief. Both prevention and treatments have associated costs for healthcare providers. The aim of this study was to systematically review the economic evidence for prevention and treatment interventions for pressure ulcers. A systematic review of comparative clinical studies that evaluate interventions to either prevent or treat pressure ulcers. Searches of the major electronic databases were conducted to identify citations that reported costs or economic...
analysis for interventions directed towards prevention or treatment of pressure ulcers. Only comparative clinical studies were included. Review articles, case-series, non-randomised studies, and studies in a foreign language that did not have an abstract in English were excluded from the review. Decisions regarding inclusion or exclusion were based on a consensus of the authors after review of the title or abstract. Potential citations were obtained for more detailed review and assessed against the inclusion criteria. The studies identified for inclusion were assessed against the 24 key criteria contained in the CHEERS checklist. Costs were standardised to US dollars and adjusted for inflation to 2012 rates. The searches identified 105 potential studies. After review of the citations a total of 23 studies were included: 12 examined prevention interventions and 11 treatments. Review against the CHEERS criteria showed that the majority of included trials had poor reporting and a lack of detail regarding how costs were calculated. Few studies reported more than aggregate costs of treatments with only a small number reporting unit cost outcomes. Existing evidence was poor in regard to the economic evaluation of interventions for the prevention and treatment of pressure ulcers. Much of the published literature had poor reporting quality when compared to guidelines which provide key criteria for studies to adequately examine costs within an economic analysis. [PUBLICATION] 63 references

Source: BNI

9.Title: A topical haemoglobin spray for oxygenating pressure ulcers: a pilot study
Citation: British Journal of Community Nursing, Mar 2015, vol. 20, no. 3, p. S12., 1462-4753 (March 2015)
Author(s): Tickle, Joy
Abstract: The effect of pressure ulcers on patient quality of life have been recognised as a real problem for many years, and the need for robust and effective management of pressure ulcers is now a prominent national health-care issue. Myriad different interventions exist for the treatment of pressure ulcers, including clinically effective dressings and pressure-relieving devices, yet many pressure ulcers still do not heal and often become a chronic wound. This is the second of a series of articles (Norris, 2014) discussing the clinical evaluation of a topical oxygen therapy in practice. It describes a small evaluation involving 18 patients with pressure ulcers. The study set out to determine the effect of a topical oxygen therapy on wound size. The therapy comprises a canister that sprays pure haemoglobin in a water solution into or onto the wound. The haemoglobin spray needs to be used at least once every 3 days, does not require training on its use and can be used in any care setting. Overall, results identified wound healing progression in all 18 wounds and wound size reduction in 17 of the 18 wounds. [PUBLICATION] 20 references
Source: BNI
Full text: Available British Journal of Community Nursing at British Journal of Community Nursing

10.Title: An evaluation of short-stretch compression systems for chronic lower-limb leg ulcers
Citation: British Journal of Community Nursing, Mar 2015, vol. 20, no. 3, p. S38., 1462-4753 (March 2015)
Author(s): Carr, Caryn, Shadwell, Janice, Regan, Pip, Hammett, Susan
Abstract: An evaluation of a new short-stretch compression system (CoFlex UBZ, TLC and TLC Lite, Aspen Medical Europe Ltd) was undertaken in four leg ulcer clinics. A total of 19 patients aged 42-93 years were treated for up to 4 weeks, or until healed. Collated data included age, underlying diseases, leg ulcer type, ulcer duration and current treatment. The evaluation included quality of life measurements, wear time, slippage, exudate strikethrough and pain using a numerical pain score. Patients were asked to document sleep patterns. Compression was applied according to clinical need. Inclusion criteria were non-healing wounds on the lower limb existing for more than 6 weeks that were suitable for compression. Exclusion criteria included patients with untreated peripheral disease, ankle-brachial pressure index (ABPI)
Source: BNI
Full text: Available British Journal of Community Nursing at British Journal of Community Nursing

11.Title: An overview of polyurethane foams in higher specification foam mattresses
Citation: Ostomy - Wound Management, Feb 2015, vol. 61, no. 2, p. 38-46, 0889-5899 (February 2015)
Author(s): Soppi, Sa, Lehtio, Juha, Saarinen, Hannu
Abstract: Soft polyurethane foams exist in thousands of grades and constitute essential components of hospital mattresses. For pressure ulcer prevention, the ability of foams to control the immersion and envelopment of patients is essential. Higher specification foam mattresses (ie, foam mattresses that relieve pressure via optimum patient immersion and envelopment while enabling patient position changes) are claimed to be more effective for preventing pressure ulcers than standard mattresses. Foam grade evaluations should include resiliency, density, hardness, indentation force/load deflection, progressive hardness, tensile strength, and elongation along with essential criteria for higher specification foam mattresses. Patient-specific requirements may include optimal control of patient immersion and envelopment. Mattress cover characteristics should include breathability, impermeability to fluids, and fire safety and not affect mattress function. Additional determinations such as hardness are assessed according to the guidelines of the American Society for Testing and Materials and the International Organization for Standardization. At this time, no single foam grade provides an optimal combination of the above key requirements, but the literature suggests a combination of at least 2 foams may create an optimal higher specification foam mattress for pressure ulcer prevention. Future research and the development of product specification accuracy standards are needed to help clinicians make evidence-based decisions about mattress
12. Title: Antibiofilm efficacy evaluation of a bioelectric dressing in mono- and multi-species biofilms  
Citation: Journal of Wound Care, Feb 2015, vol. 24, no. 2, p. S10, 0969-0700 (February 2015)  
Author(s): Kim, H., Izadjoo, M.J.  
Abstract: Objective: Chronic infections are often related to the formation of single or polymicrobial biofilms, which lead to hard-to-treat infections, difficult wound management, and recurrent infections. In this study, we evaluated in vitro antibiotic properties of a silver and zinc bioelectric dressing (Procellera). Method: We customised and established a poloxamer biofilm model using glass coverslips for the efficacy evaluation of the bioelectric dressing. For antimicrobial susceptibility testing, each bacterial pathogen was diluted to 105 CFUs/ml, mixed with 30% poloxamer hydrogels and dropped onto round glass coverslips (25mm diameter) as an abiotic support. Additionally, we mixed four bacterial strains and developed multi-species biofilms in the poloxamer model to examine anti-biofilm efficacy testing against polymicrobial biofilms. Results: After 24 hours incubation, we observed significant inhibition of bacterial growth in nine pathogens (~2- or 3-fold log10 reduction) compared to controls (no treatment, gauze, and blank polyester with no silver and zinc). The smallest effect was seen with Enterococcus faecalis strain where there was approximately a 1-fold log10 reduction of microbial growth. The antibiofilm efficacy against multi-species (four pathogens) biofilms, evaluated on chromogenic agar plates, was 1- or 2-fold log10 reduction compared to controls. Conclusion: This poloxamer biofilm model was easy to set up, simple to apply, and demonstrated appropriate biofilm formation. The data showed the formation of biofilms inoculated with either single or polymicrobial bacteria under no shear condition, and the bioelectric dressing tested in this study showed effective antibiofilm activity against both the mono- and multi-species biofilms. [Publication] 21 references  
Source: BNI  
Full text: Available Mark Allen Group at Journal of Wound Care

13. Title: Association of Sociodemographic Factors with Hope for Cure, Religiosity, and Spirituality in Patients with Venous Ulcers  
Citation: Advances in Skin and Wound Care, Feb 2015, vol. 28, no. 2, p. 76-82, 1527-7941 (February 2015)  
Author(s): Salomé, Geraldo Magela, de Almeida, Sergio Aguinaldo, Ferreira, Lydia Masako  
Abstract: Salome et al evaluate the association of sociodemographic factors with hope for cure and levels of religiosity and spirituality in patients with venous leg ulcers (VLUs). The results shows that most patients with VLUs had low levels of spirituality, did not perceive divine intervention in their daily Die or practice religious activities such as prayer, and had moderate hope for cure. [Publication] 51 references  
Source: BNI

14. Title: Biofilm in wound care  
Citation: British Journal of Community Nursing, Mar 2015, vol. 20, no. 3, p. S6, 1462-4753 (March 2015)  
Author(s): Rajpaul, Kumal  
Abstract: A biofilm can be described as a microbial colony encased in a polysaccharide matrix which can become attached to a wound surface. This can affect the healing potential of chronic wounds due to the production of destructive enzymes and toxins which can promote a chronic inflammatory state within the wound. Biofilms can be polymicrobial and can result in delayed wound healing and chronic wound infection resistant to antibiotics, leading to prolonged hospitalisation for some patients. There appears to be a correlation between biofilms and non-healing in chronic wounds. It is suggested that biofilms are a major player in the chronicity of wounds. They are a complex concept to diagnose and management needs to be multifactorial. [Publication] 28 references  
Source: BNI  
Full text: Available British Journal of Community Nursing at British Journal of Community Nursing

15. Title: Changes in Classifications of Chronic Lower-Limb Wound Codes in Patients with Diabetes: ICD-9-CM Versus ICD-10-CM  
Citation: Advances in Skin and Wound Care, Feb 2015, vol. 28, no. 2, p. 84-92, 1527-7941 (February 2015)  
Author(s): Lowe, Jeanne R, Raugi, Greg, Reiber, Gayle E, Whitney, JoAnne D  
Abstract: Lowe et al determine the sensitivity and specificity of International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM) and ICD-10-CM codes for individuals with diabetes and foot ulcers. The ICD-9 and ICD-10 are similar for data capture on health history variables, but wound variables are captured more accurately using ICD-10. The increased specificity of ICD-10 for ulcer location and severity improves identification and tracking ulcers during an episode of care. [Publication] 16 references  
Source: BNI

16. Title: Clinical audit of a lymphoedema bandaging system: a foam roll and cohesive short stretch bandages
Comparative study of two antimicrobial dressings in infected leg ulcers: a pilot study

Citation: Journal of Wound Care, Mar 2015, vol. 24, no. 3, p. 121-127, 0969-0700 (March 2015)
Author(s): Mosti, G., Magliaro, A., Mattaliano, V., Picerni, P., Angelotti, N.
Abstract: Objective: The aim of the study was to compare the efficacy of a microorganism-binding (MB) dressing with a silver-containing hydrofiber (SCH) dressing in controlling the bacterial loads of heavily colonised or locally infected chronic venous leg ulcers, before surgical management with homologous skin grafts. Method: A randomised comparative single centre study recruited patients presenting with hard-to-heal critically colonised or locally infected leg ulcers, who could be treated with skin grafting. Inclusion criteria included; ulcers of vascular aetiology, over 18 years old, a wound duration =6 months and ankle brachial index (ABPI) >0.6. Patients were randomly assigned to treatment with SCH dressings (Aquacel Ag) or MB dressing (Cutimed Sorbact). Dressings were changed daily over a four-day observation period, after which they were taken for a skin grafting procedure. Swab samples from ulcer beds were taken in order to quantify the bacterial load at inclusion (D0) and at the end of the observation period day 4 (D4). No antibiotics were administered before or during the evaluation period. Results: Both groups (n=20 SCH, n=20 MB) were similar in gender, age, pathophysiology (both had 15 patients with venous leg ulcers and 5 with arterial leg ulcers), ulcer surface, ulcer duration, treatment-related pain and initial bacterial load. Analysing bacterial load variation showed a significant reduction of bacterial burden at D4 in both groups. In the SCH group, we found an average bacterial load reduction of 41.6%, with an average reduction of 73.1% in the MB group (p
Source: BNI
19. Title: Comparison of Standardized Clinical Evaluation of Wounds Using Ruler Length by Width and Scout Length by Width Measure and Scout Perimeter Trace
Citation: Advances in Skin and Wound Care, Mar 2015, vol. 28, no. 3, p. 116-121, 1527-7941 (March 2015)
Author(s): Langemo, Diane, Spahn, James, Spahn, Thomas, Pinnamaneni, V Chowdry
Abstract: The study objective was to examine precision in wound measurement using a recently Food and Drug Administration-approved Scout (WoundVision, LLC, Indianapolis, Indiana) device to measure wound length (L) and width (W). Wound perimeter and a ruler measurement of L and W were also made. Images of 40 actual patient wounds were measured using the Scout device. All 3 techniques (length, width, perimeter) demonstrated acceptable within and between reader precision; however, the best precision was in wound perimeter measurement. [PUBLICATION] 14 references
Source: BNI

20. Title: Comparison of lipidocolloid and chlorhexidine-impregnated tulle gras dressings following microscopically controlled surgery
Citation: Journal of Wound Care, Mar 2015, vol. 24, no. 3, p. 135-138, 0969-0700 (March 2015)
Author(s): Hessam, S., Georgas, D., Sand, M., Kassa, T., Bruns, N., Bechara, F.G.
Abstract: Objective: Modified microscopically controlled surgery (MCS) is a staged and margin-controlled excision; after MCS, the selection of an appropriate initial wound dressing plays an important role in wound healing. A wide range of dressings is available for temporary wound coverage; however, data comparing different types of wound dressings after MCS are lacking. The aim of this study was to compare two commonly used and commercially available types of wound dressings. Method: We assessed pain levels, wound adherence, bleeding upon dressing removal and signs of infection, with chlorhexidine-impregnated tulle gras and a lipidocolloid dressing used for primary wound dressing following MCS. Results: A total of 42 patients were included. Adherence of the dressing to the wound (p
Source: BNI
Full text: Available Mark Allen Group at Journal of Wound Care

21. Title: Dehydrated human amnion/chorion tissue in difficult-to-heal DFUs: a case series
Citation: Journal of Wound Care, Mar 2015, vol. 24, no. 3, p. 104-111, 0969-0700 (March 2015)
Author(s): Penny, H., Rifkah, M., Weaver, A., Zaki, P., Young, A., Meloy, G., Flores, R.
Abstract: Diabetic foot ulcers (DFUs) occur as a result of multifactorial complications and are commonly found in the diabetic community. Underlying disease states such as neuropathy and peripheral vascular disease can slow healing rates, potentially leading to recurrence, amputation, and increased mortality. As with many other disease processes, DFUs have several treatment options, such as debriding agents, alginate seaweed extract, hydrocolloid gels, and amniotic membrane allografts. The presented cases all used a dehydrated human amnion/chorionic membrane allograft (dHACM; EpiFix) to aid the healing process. Human amniotic epithelial membranes have seen increased usage due to their ability to enhance the healing process and accelerate cellular regeneration. The DFUs healed in all of the five patients treated, and patients saw a full recovery in 2.5-11 weeks. In addition, the healing time decreased in spite of the non-adherence seen in three of the patients. These results suggest another possible use for dHACM; however, further studies are required to confirm these data. [PUBLICATION] 12 references
Source: BNI
Full text: Available Mark Allen Group at Journal of Wound Care

22. Title: Diagnostic and treatment decision making in community nurses faced with a patient with possible venous leg ulceration: A signal detection analysis
Citation: International Journal of Nursing Studies, Jan 2015, vol. 52, no. 1, p. 325-333, 0020-7489 (January 2015)
Author(s): Thompson, Carl, Adderley, Una
Abstract: Judgements and decisions about venous leg ulcer management are characterised by uncertainty. Good judgements and reduced variations in practice require nurses to identify relevant "signals" in clinical encounters. Nurses, even experienced ones, vary in their ability to separate these signals from surrounding noise. Examine specialist and generalist nurses' discrimination of clinical signals and noise when (i) diagnosing venous versus other causes leg ulceration, and (ii) starting multilayer compression therapy. A signal detection analysis within a cross sectional survey. Four English NHS districts. Tissue viability specialist (n = 18) and generalist (district and practice nurses, n = 18) sampled from networks of nurses caring for people with leg ulcers. Mean age was 46 years, 78% had more than 10 years nursing experience. They worked on average 32.5 h per week, of which 10 h were spent caring for people with leg ulcers. 110 clinical scenarios based on anonymous patient data from a large clinical trial of compression therapy for leg ulceration. The scenarios were classed as either signal (venous leg ulcer present and/or compression therapy warranted, n = 57) or no signal cases (other kind of ulcer and/or compression therapy contraindicated, n = 53) by four experts. Nurses made diagnostic and treatment judgements for each scenario. A signal detection analysis was undertaken for each nurse. Measures of signal detection (d
prime or d') and judgement tendency or bias (C) were computed. Differences between specialist and generalist nurses were tested for using the Mann Whitney U test and graphically explored using Receiver Operating Curves (ROC). Specialists identified more true positive cases than the generalist nurses: 75% vs. 59% for the diagnostic judgement (p = 0.01) and 70% vs. 60% for the treatment judgement. They were significantly more sensitive to the signals present (d'  1.68 vs. 1.08 for the diagnostic judgement and 1.62 vs. 1.11 for the treatment judgement). Specialists exhibited a significantly higher bias towards initiating treatment (C = .81 vs. .56, p = 0.01) but this did not extend to their diagnostic judgements. Specialists also varied slightly less in their signal detection abilities. Nurse specialism was associated with better, but still variable, clinical diagnostic and treatment signal detection in simulated venous leg ulcer management. [PUBLICATION] 59 references

Source: BNI

23. Title: Evaluation of bactericidal effect of three antiseptics on bacteria isolated from wounds

Citation: Journal of Wound Care, Jan 2015, vol. 24, no. 1, p. 5-10, 0969-0700 (January 2015)


Abstract: Objective: Antiseptics are widely used in wound management to prevent or treat wound infections due to their proven wound healing properties regardless of their cytotoxicity. The objective of this study was to determine the bactericidal effects of three antiseptics on pathogens known to cause wound infections. Method: The study was carried out at a tertiary care hospital and a university microbiology laboratory in Sri Lanka in 2013. The three acids (acetic acid, ascorbic acid and boric acid) in increasing concentration (0.5%, 0.75% and 1%) were tested against bacterial suspensions equivalent to 0.5 McFarland standard. The Bacteria isolates used were isolated from wound and standard strains of Staphylococcus aureus, Escherichia coli and Pseudomonas aeruginosa. Results: There were 33 (68.8%) Coliforms, 10 (20.8%) Pseudomonas species, and 5 (10.4%) strains of Staphylococcus aureus. Acetic acid at concentration of 0.5% inhibited growth of 37 (77%) and 42 (87.5%) of tested isolates when exposed for 30 and 60 minutes, respectively. However 100% inhibition was achieved at four hours. At a concentration of 0.75%, 40 (83.3%) and 44 (91.7%) were inhibited when exposed for 30 and 60 minutes, respectively, with 100% inhibition at 4 hours. At concentration of 1%, 46 (95.8%) inhibition was seen at 30 minutes and 100% inhibition at 60 minutes. Ascorbic acid, at 0.5% and 0.75% concentrations, inhibited growth of 45 (93.7%) and 47 (97.9%) of isolates respectively when exposed for 30 minutes. At these two concentrations, 100% inhibition was achieved when exposed for one hour. At 1% concentration, 100% inhibition was achieved at 30 minutes. Boric acid did not show bactericidal effect at concentrations of 0.5%, 0.75% and 1%. Pseudomonas species were inhibited at 30 minutes by 0.5% acetic acid. Bactericidal effect against all the standard strains was seen with three acids at each concentration tested from 30 minutes onwards. Conclusion: Ascorbic acid was bactericidal for all organisms tested within the shortest exposure time at the lowest concentration compared to other two acids. Despite promising bactericidal effects, further studies warrant, as ongoing debates on toxicity of acids on tissue epithelialisation. Application of antiseptics for a shorter duration could overcome this problem without losing bactericidal activity. [PUBLICATION] 18 references

Source: BNI

Full text: Available Mark Allen Group at Journal of Wound Care

24. Title: Evaluation of the suitability of root cause analysis frameworks for the investigation of community-acquired pressure ulcers: a systematic review and documentary analysis

Citation: Journal of Clinical Nursing, Feb 2015, vol. 24, no. 3-4, p. 536-545, 0962-1067 (February 2015)

Author(s): McGraw, Caroline, Drennan, Vari M

Abstract: To evaluate the suitability of root cause analysis frameworks for the investigation of community-acquired pressure ulcers. The objective was to identify the extent to which these frameworks take account of the setting where the ulcer originated as being the person’s home rather than a hospital setting. Pressure ulcers involving full-thickness skin loss are increasingly being regarded as indicators of nursing patient safety failure, requiring investigation using root cause analysis frameworks. Evidence suggests that root cause analysis frameworks developed in hospital settings ignore the unique dimensions of risk in home healthcare settings. A systematic literature review and documentary analysis of frameworks used to investigate community-acquired grade three and four pressure ulcers by home nursing services in England. No published papers were identified for inclusion in the review. Fifteen patient safety investigative frameworks were collected and analysed. Twelve of the retrieved frameworks were intended for the investigation of community-acquired pressure ulcers; seven of which took account of the setting where the ulcer originated as being the patient’s home. This study provides evidence to suggest that many of the root cause analysis frameworks used to investigate community-acquired pressure ulcers in England are unsuitable for this purpose. [PUBLICATION] 38 references

Source: BNI

25. Title: Head-of-Bed Elevation and Early Outcomes of Gastric Reflux, Aspiration and Pressure Ulcers: A Feasibility Study

Citation: American Journal of Critical Care, Jan 2015, vol. 24, no. 1, p. 57-66, 1062-3264 (January 2015)

Author(s): Dykeman, Marilyn Schallo; Betsy, Metheny, Norma, Kirby, John, Pierce, Janet

Abstract: Background Guidelines recommending head of bed (HOB) elevation greater than 30o to prevent ventilator-
associated pneumonia conflict with guidelines to prevent pressure ulcers, which recommend HOB elevation less than 30o.

Objectives To examine the feasibility of 45o HOB elevation and describe and compare the occurrence of reflux, aspiration, and pressure ulcer development at 30o and 45o HOB elevation. Methods A randomized 2-day crossover trial was conducted. HOB angle was measured every 30 seconds. Oral and tracheal secretions were analyzed for pepsin presence. Skin was assessed for pressure ulcers. Wilcoxon signed rank tests and Kendall t correlations were conducted. Results Fifteen patients were enrolled; 11 completed both days. Patients were maintained at 30o (mean, 30o) for 96% of minutes and at 45o (mean, 39o) for 77% of minutes. No patients showed signs of pressure ulcers. A total of 188 oral secretions were obtained, 82 (44%) were pepsin-positive; 174 tracheal secretions were obtained, 108 (62%) were pepsin-positive. The median percentage of pepsin-positive oral secretions was not significantly higher (P = .11) at 30o elevation (54%) than at 45o elevation (20%). The median percentage of pepsin-positive tracheal secretions was not significantly higher (P = .37) at 30o elevation (71%) than 45o elevation (67%). Deeper sedation correlated with increased reflux (P = .03). Conclusions HOB elevation greater than 30o is feasible and preferred to 30o for reducing oral secretion volume, reflux, and aspiration without pressure ulcer development in gastric-fed patients receiving mechanical ventilation. More deeply sedated patients may benefit from higher HOB elevations. [PUBLICATION]

Source: BNI

Full text: Available American journal of critical care : an official publication, American Association of Critical-Care Nurses at American Journal of Critical Care

26.Title: Human acellular dermal wound matrix for treatment of DFU: literature review and analysis
Citation: Journal of Wound Care, Mar 2015, vol. 24, no. 3, p. 128-134, 0969-0700 (March 2015)
Author(s): Reyzelman, A.M., Bazarov, I.
Abstract: Diabetic foot ulcers (DFUs) affect a significant number of people and the treatment is challenging and costly. Since only a small portion of patients respond to standard care, the majority require more advanced wound healing interventions. Human acellular dermal matrices - regenerative tissue matrices derived from screened donated skin - can aid wound closure by restoring the missing physiological factors to the microenvironment. A literature review of the clinical literature was performed to estimate the comparative effectiveness of one specific human acellular dermal wound matrix (HADWM; Graftjacket regenerative tissue matrix) versus standard care in healing DFUs. Outcomes from three prospective, controlled clinical trials, which included 154 patients with DFUs, were pooled. A comparative analysis revealed a statistically significant reduction in mean wound healing time, 1.7 weeks, as well as a nearly four-fold improvement in the chance of healing ulcers treated with HADWM versus moist wound-care. These pooled results suggest that HADWM may improve healing outcomes for these difficult-to-heal lower extremity wounds. [PUBLICATION] 43 references
Source: BNI

Full text: Available Mark Allen Group at Journal of Wound Care

27.Title: Infrared Skin Thermometry: An Underutilize Cost-effective Tool for Routine Wound Care Practice and Patient High-Risk Diabetic Foot Self-monitoring
Citation: Advances in Skin and Wound Care, Jan 2015, vol. 28, no. 1, p. 37-44, 1527-7941 (January 2015)
Author(s): Sibbald, R Gary, Mufti, Asfandyar, Armstrong, David G
Abstract: The aim of this article is to provide practitioners with an overview of infrared skin thermometry for everyday wound care practice. Thermometers have the potential for home use by patients with neuropathy to self-detect damage from repetitive trauma that will increase the risk of foot ulceration. [PUBLICATION] 37 references
Source: BNI

28.Title: Is depression a risk factor for diabetic foot ulcers? 11-years follow-up of the Nord-Trøndelag Health Study (HUNT)
Citation: Journal of Diabetes and its Complications, Jan 2015, vol. 29, no. 1, p. 20-25, 1056-8727 (January 2015)
Author(s): Iversen, Marjolein M, Tell, Grethe S, Espehaug, Birgitte, Midthjell, Kristian, Graue, Marit, Rokne, Berit, Berge, Line Iden, Østbye, Truls
Abstract: Aim: To prospectively examine whether depressive symptoms increase the risk of diabetes and a diabetic foot ulcer. Methods: The Nord-Trøndelag Health Study (HUNT) is a community-based longitudinal study. The Hospital Anxiety and Depression Scale (HADS-D subscale) assessed depressive symptoms. We followed individuals with complete HADS-D data from HUNT2 (1995-97) and assessed whether they reported diabetes with or without a history of diabetic foot ulcer (DFU) in HUNT3 (2006-08) (n=36,031). Logistic regression was used to investigate the effect of depressive symptoms on subsequent development of diabetes and of DFU. Results: Unadjusted odds for reporting diabetes at follow-up was higher among individuals who reported a HADS-D score>=8 at baseline (OR 1.30 95% CI, 1.07-1.57) than among those reporting a lower score. After adjusting for age, gender and BMI, this association was no longer significant. The odds of developing a DFU was almost two-fold (OR=1.95 95% CI, 1.02-3.74) for those reporting a HADS-D score of 8-10, and 3-fold (OR=3.06 95% CI, 1.24-7.54) for HADS-D scores>=11, compared to HADS-D scores
Source: BNI
29. **Title:** Measurement of microelectric potentials in a bioelectrically-active wound care device in the presence of bacteria  
**Citation:** Journal of Wound Care, Jan 2015, vol. 24, no. 1, p. 23-33, 0969-0700 (January 2015)  
**Author(s):** Park, S.S., Kim, H., Makin, I.R.S., Skiba, J.B., Izadjoo, M.J.  
**Abstract:** Objective: Wound healing is enhanced in the presence of an external electrical field. The purpose of this study was first to investigate whether microelectric potentials (EPs) can be generated when the innovative design of a silver (Ag)- and zinc (Zn)-printed wound care device was exposed to saline solution which is commonly used to clean wound sites; and second to measure the generated EPs while the device was exposed to bacterial culture suspensions to mimic infection. Method: An Ag/Zn-printed test specimen as a wound care device was designed to accommodate Ag and Zn half-cell potentials by alternatively printing them on a woven polyester material in a well-characterised dot matrix pattern. A well-calibrated high impedance EPs measuring system was used to measure any EPs generated. Ultrasensitive inductively coupled plasma analysis was performed to determine whether the device induced any increase in trace metals in rabbit blood following implantation for 2-4 weeks. Results: EPs were consistently generated under various conductive solutions at the levels of 120.4±26.3mV (average±standard deviation) on Ag dots and -506.5±76.3mV over Zn dots to form microcircuits with EPs of 626.7±86.3mV between the Ag and Zn metallic elements of the dressing. Interestingly, the patterns of EPs generated with stable polarities were consistent when the device was exposed to bacterial suspensions for mimicking wound infection. Implantation of the device did not cause any increase in Ag or Zn in rabbit blood. Conclusion: The Ag/Zn-printed wound device generated sustained EPs successfully in the presence of various conductive fluids without changing EPs including polarities. Consistently generated EPs at each battery couple with Ag/Zn-based wound device would restore disrupted physiologic bioelectric signals on wound sites, which could lead to improved wound healing. [PUBLICATION] 47 references

**Source:** BNI  
**Full text:** Available Mark Allen Group at Journal of Wound Care

30. **Title:** Palliative Wound Care Management Strategies for Palliative Patients and Their Circles of Care  
**Citation:** Advances in Skin and Wound Care, Mar 2015, vol. 28, no. 3, p. 130-140, 1527-7941 (March 2015)  
**Author(s):** Woo, Kevin Y, Krasner, Diane L, Kennedy, Bruce, Wardle, David, Moir, Olivia  
**Abstract:** The principles of palliative wound care should be integrated along the continuum of wound care to address the whole person care needs of palliative patients and their circles of care, which includes members of the patient unit including family, significant others, caregivers, and other healthcare professionals that may be external to the current interprofessional team. Palliative patients often present with chronic debilitating diseases, advanced diseases associated with major organ failure (renal, hepatic, pulmonary, or cardiac), profound dementia, complex psychosocial issues, diminished self-care abilities, and challenging wound-related symptoms. This article introduces key concepts and strategies for palliative wound care that are essential for interprofessional team members to incorporate in clinical practice when caring for palliative patients with wounds and their circles of care. [PUBLICATION] 81 references

**Source:** BNI

31. **Title:** Physical activity levels and torso orientations of hospitalized patients at risk of developing a pressure injury: An observational study  
**Citation:** International Journal of Nursing Practice, Feb 2015, vol. 21, no. 1, p. 11-17, 1322-7114 (February 2015)  
**Author(s):** Chaboyer, Wendy, Mills, Peter M, Roberts, Shelley, Latimer, Sharon  
**Abstract:** Pressure injury guidelines recommend regular repositioning yet patients’ mobility and repositioning patterns are unknown. An observational study using activity monitors was undertaken to describe the 24h activity patterns of 84 hospitalized patients at risk of developing a pressure injury. The vast majority of participants’ time was spent in the sedentary activity range (94%±3%) followed by the light range (5%±4%). Patients changed their posture a median of 94 (interquartile range 48) time in the 24-h period (range 11-154), or [asymptotically =]3.8 times per hour. Although a main focus for pressure injury prevention has been on repositioning, this study shows that patients with restricted mobility are actually moving quite often. Therefore, it might be appropriate to focus more attention on other pressure injury prevention strategies such as adequate nutrition, appropriate support surfaces and good skin care. [Publication] 42 references

**Source:** BNI

32. **Title:** Preventing pressure ulcers in patients in intensive care  
**Citation:** Nursing Standard, Feb 2015, vol. 29, no. 26, p. 53-61, 0029-6570 (February 25, 2015)  
**Author(s):** Gage, William  
**Abstract:** This article discusses the prevention and management of pressure ulcers in intensive care. It outlines a service improvement project conducted in the intensive care units at Imperial College Healthcare NHS Trust with the aim of reducing the incidence of hospital-acquired pressure ulcers. The project introduced a set of ‘essential standards’ and an
audit tool to monitor compliance. Implementation of the essential standards resulted in a reduction in the total number of pressure ulcers acquired in the four intensive care units, with an absence of any category 3 or 4 pressure ulcers (the most severe categories of pressure ulcer). The article describes the measures taken to ensure the sustainability and spread of the initiative within the NHS trust. [PUBLICATION] 23 references

Source: BNI

33. Title: Prevention and management of diabetic foot ulcers
Citation: British Journal of Community Nursing, Mar 2015, vol. 20, no. 3, p. S30., 1462-4753 (March 2015)
Author(s): Turns, Martin
Abstract: As part of an annual foot review, trained and competent personnel should examine patients' feet to detect risk factors for ulceration. Foot examination with shoes and stockings removed should include: palpation of foot pulses; testing foot sensations using 10g monofilament or vibration; inspection for significant callus or deformed nails; inspection for any structural deformity; asking about any previous ulceration; checking for signs of ulceration; asking about any pain; and inspecting footwear. Following assessment, a foot risk classification score should be given. The person with diabetes should then be informed of their risk score, with education offered regarding future foot-care management. Diabetic foot complications include ulceration, Charcot foot, painful neuropathy, gangrene and amputation. Risk factors for ulceration include non-palpable pulses, insensitive foot, significant callus, deformed nails, history of previous ulcer or amputation, tissue damage or signs of ulceration, foot pain and unsuitable footwear. [PUBLICATION] 23 references

Source: BNI
Full text: Available British Journal of Community Nursing at British Journal of Community Nursing

34. Title: Prophylactic dressing to minimize sacral pressure injuries in high-risk hospitalized patients: a pilot study
Citation: Journal of Advanced Nursing, Mar 2015, vol. 71, no. 3, p. 688-696, 0309-2402 (March 2015)
Author(s): Walker, Rachel, Aitken, Leanne M., Huxley, Leisa, Juttner, Melanie
Abstract: Aim. In this paper, we describe a trial protocol used to assess feasibility related to: study administration (recruitment, randomization, retention, compliance, eligibility criteria, suitability of protocol instructions and data collection questionnaires); resource and data management (suitability of site, time and budget allocation, management of personnel and data); intervention fidelity (treatment dose, violations); and effect size. Background. Pressure injury can lead to increases in hospital length of stay and cost. The sacrum is identified as one of the most common anatomical pressure injury sites for hospitalized patients. Silicone foam border dressings have been proposed as one strategy to reduce pressure injury incidence; however, rigorous testing of benefit in a general medical-surgical population is required. Design. Randomized controlled trial. Methods. Eighty patients will be recruited after assessment of high risk of pressure injury in a large tertiary hospital in south-east Queensland, Australia. Eligible, consenting participants will be randomly allocated to either a control group (routine care) or an intervention group (routine care and a sacral prophylactic dressing). The primary outcomes comprise feasibility criteria as identified above. The secondary measure is the presence and severity of sacral pressure injury via blind assessment of digital photographs. Research ethics approval was received in October 2013. Discussion. Prophylactic dressings applied to the sacrum may be an effective method for reducing pressure injury in high-risk general medical-surgical patients. However, more rigorous studies to confirm benefit are required. This pilot study will determine the feasibility and effect size to inform a larger randomized controlled trial. [PUBLICATION] 39 references

Source: BNI

35. Title: Reducing avoidable pressure ulcers in the community
Citation: Nursing Standard, Feb 2015, vol. 29, no. 26, p. 62-70, 0029-6570 (February 25, 2015)
Author(s): Parnham, Alison, Pankhurst, Sarah, Dabell, Wendy
Abstract: The elimination of avoidable pressure ulcers remains a challenge in healthcare provision, represents an increasing financial burden on resources and continues to affect patients’ quality of life. Many pressure ulcers are deemed to be avoidable and there are several factors that can influence this, including the development of a care delivery system and a service delivery strategy that incorporate a comprehensive structure, a meticulous process and measurable outcomes. Nottingham CityCare developed a strategy to reduce avoidable pressure ulcers. The implementation of the strategy in an inner city community setting is discussed. The importance of eliminating pressure ulcers is explored, and the barriers to care delivery are reviewed, demonstrating how a new culture in clinical practice can ensure the elimination of avoidable pressure ulcers. The challenges within the implementation process are reflected on and the implementation of the SSKIN (Surface, Skin inspection, Keep your patient moving, Incontinence and moisture, Nutrition and hydration) phenomenon is reviewed in relation to care delivery, record-keeping and evaluation. [PUBLICATION] 40 references

Source: BNI

36. Title: Relative contributions of interface pressure, shear stress, and temperature on ischemic-induced, skin-reactive hyperemia in healthy volunteers: a repeated measures laboratory study
Citation: Ostomy - Wound Management, Feb 2015, vol. 61, no. 2, p. 16-25, 0889-5899 (February 2015)
37. Title: Safety and efficacy of active Leptospermum honey in neonatal and paediatric wound debridement

Citation: Journal of Wound Care, Mar 2015, vol. 24, no. 3, p. 95-103, 0969-0700 (March 2015)

Author(s): Amaya, R.

Abstract: Objective: Safety is a critically important factor in the selection of products used in neonatal and paediatric wound care. Given the lack of standardisation of neonatal and paediatric wound care protocols, the goal of this study was to present data on the safety and efficacy of active Leptospermum honey (ALH) in this patient population. Method: A multicentre, retrospective chart review was conducted at eight inpatient facilities and one outpatient clinic between October 2011 and March 2014. The number of applications of ALH, adverse events, and the success of debridement and wound healing were recorded. Results: Data were collected on 115 neonatal and paediatric patients, with 121 wounds requiring debridement, treated with ALH. Patients were treated for an average of 18.7 days. ALH was well tolerated, with two (1.7%) patients reporting adverse events involving a transient stinging sensation on application, which did not prohibit additional applications of ALH. Successful debridement was achieved in 86.0% (104 wounds), and 77.7% (94 wounds) were successfully closed using nonsurgical intervention. Outcomes in neonates were similar to the overall paediatric population, with 86.1% (31/36) wounds successfully debrided with no adverse events. In a subset of six patients with available pre- and post-treatment data, no clinically meaningful changes in white blood cell counts or glucose levels were associated with the initiation of treatment with ALH. [PUBLICATION] 17 references

Source: BNI

Full text: Available Mark Allen Group at Journal of Wound Care

38. Title: Sanguis Draconis (Daemonorops draco): A Case Report of Treating a Chronic Pressure Ulcer With Tunneling

Citation: Holistic Nursing Practice, Jan 2015, vol. 29, no. 1, p. 48-52, 0887-9311 (Jan-Feb 2015)

Author(s): Ji, Shu, Zhang, Guizhen, Hua, Yafang, Jin, Xueqin

Abstract: Pressure ulcers are a frequently encountered difficulty in clinical nursing care. In cases of pressure ulcers, continued pressure on soft tissue leads to pathological processes in affected tissues that include ischemia and hypoxia, nutritional and metabolic disorders, and degeneration and necrosis. Pressure ulcers are a common clinical complication. In February 2013, our department admitted a patient with Parkinson's disease who suffered from a chronic pressure ulcer with tunneling. This patient was given an integrative therapy treatment protocol that consisted of external applications of a phytomedicine called sanguis draconis, combined with a series of conventional treatments, including local oxygen therapy, custom-built vacuum aspiration, and anti-infection therapies. The patient's integrative treatment program resulted in complete amelioration of the pressure ulceration. The following sections describe the nursing experiences associated with this case study. [PUBLICATION] 16 references

Source: BNI

Full text: Available through publisher

39. Title: Single-use negative pressure wound therapy for the treatment of chronic lower leg wounds

Citation: Journal of Wound Care, Feb 2015, vol. 24, no. 2, p. S4., 0969-0700 (February 2015)

Author(s): Schwartz, J.A., Goss, S.G., Facchin, F., Gendics, C., Lantis, J.C.

Abstract: Objective: Lower extremity ulcers are caused by multiple disease processes and contribute to a high level of patient morbidity and health-care spending in the US. Negative pressure wound therapy (NPWT) has been used extensively for wound bed preparation. Our aim is to assess the efficacy of an affordable, low-profile single-use NPWT (single-use NPWT) on chronic lower extremity wounds that would usually be deemed too small or superficial for traditional NPWT. Method: A prospective pilot study was undertaken in which chronic lower extremity wounds were treated with single-use NPWT. Study visits were biweekly for primary contact dressing change, with the negative pressure unit being changed weekly. Biweekly assessments were made of wound appearance, surface area, depth, exudate
amount, peri-wound skin integrity, and signs of clinical infection. Digital photography was performed at each visit. Patients with venous leg ulcers (VLUs) were treated with a 3-layer wrap. Diabetic foot ulcers (DFUs) were treated with off-loading shoes. Results: The study recruited 12 patients. There were 13 wounds in total; two DFUs, two traumatic/postoperative/pressure ulcers, and nine VLUs. DFUs decreased in size on average 62%, VLUs by 32%, and traumatic/postoperative/pressure wounds by 74%. The wound appearance became more favourable and the wound depth decreased with the use of single-use NPWT. Conclusion: Single-use NPWT is a suitable therapy for chronic lower extremity wounds. Single-use NPWT led to a decrease in wound size and depth, an increased amount of granulation tissue, and a high level of patient satisfaction, with a low complication rate. [PUBLICATION] 14 references

Source: BNI

Full text: Available Mark Allen Group at Journal of Wound Care

40. Title: Squamous cell carcinoma arising from a recurrent ischial pressure ulcer: a case report
Citation: Ostomy - Wound Management, Feb 2015, vol. 61, no. 2, p. 48-50, 0889-5899 (February 2015)
Abstract: Marjolin’s ulcer is the malignant transformation of long-standing chronic pressure ulcers and requires prompt diagnosis and treatment. A 46-year-old man with an 8-year history of traumatic spinal injury with paraplegia presented with a recurrent ischial pressure ulcer. The initial ulcer, which developed 6 years earlier, was a Stage IV sacral ulcer. The wound was debrided and pathology showed epithelial hyperplasia, acanthosis, hyperkeratosis accompanied by mild inflammation, and fibrosis without any malignant transformation. The lesion was covered with a fasciocutaneous bipedicled flap. Four years later, the patient presented with a similar ulcer in the same location. Histology showed the presence of a well-differentiated squamous cell carcinoma (SCC). Following a wide excision, the lesion was covered with a gluteal maximal V-Y musculocutaneous advancement flap. At last follow-up 14 months postoperatively, there was no evidence of recurrence or metastatic disease. Clinicians must be aware of known risk factors for the development of SCC. [Publication] 12 references

Source: BNI

41. Title: The Incidence of Lower-Extremity Amputation and Bone Resection in Diabetic Foot Ulcer Patients Treated with a Human Fibroblast-Derived Dermal Substitute
Citation: Advances in Skin and Wound Care, Jan 2015, vol. 28, no. 1, p. 17-20, 1527-7941 (January 2015)
Author(s): Frykberg, Robert G, Marston, William A, Cardinal, Matthew
Abstract: Diabetic foot ulcers (DFUs) are frequently recalcitrant and at risk for infection, which may lead to lower-extremity amputation or bone resection. Reporting the incidence of amputations/bone resections may shed light on the relationship of ulcer healing to serious complications. This study aimed to evaluate the incidence of amputations/bone resections in a randomized controlled trial comparing human fibroblast-derived dermal substitute plus conventional care with conventional care alone for the treatment of DFUs. Ulcer-related amputation/bone resection data were extracted from data on all adverse events reported for the intent-to-treat population, and amputations were categorized by type: below the knee, Syme, Chopart, transmetatarsal, ray, toe, or partial toe. Data were analyzed retrospectively for the incidence of amputation/bone resection by treatment. The incidence of amputation/bone resection in the study was 8.9% overall, 5.5% for patients receiving human fibroblast-derived dermal substitute, and 12.6% for patients receiving conventional care. Of the 28 cases of amputation/bone resection, 27 were preceded by ulcer-related infection. There were significantly fewer amputations/bone resections in patients who received human fibroblast-derived dermal substitute versus conventional care, likely related to the lower incidence of infection adverse events observed in the human fibroblast-derived dermal substitute treatment group. [Publication] 16 references

Source: BNI

42. Title: The complication of mucocutaneous separation after stoma surgery
Citation: Gastrointestinal Nursing, Mar 2015, vol. 13, no. 2, p. 23-30, 1479-5248 (March 2015)
Author(s): Ndlovu, Simekuhle
Abstract: After stoma formation, it is possible for an ostomate (a person with a stoma) to develop a complication known as mucocutaneous separation. This is a postoperative complication and can be experienced by a person with a colostomy, ileostomy, or urostomy - the three most common stoma types. Early assessment and management are crucial to avoid further complications. Effective documentation of the treatment given is also important. This article provides an overview of mucocutaneous separation: the recognition of the problem and management of the separation. [Publication] 25 references

Source: BNI

Full text: Available Mark Allen Group at Gastrointestinal Nursing

43. Title: The effect of concentration of tackifying agent on adhesive and skin-protective properties of ceramide 2-containing hydrocolloid dressings
Abstract: Objective: In the treatment of pressure ulcers and leg ulcers it is necessary to achieve an effective balance between adhesive and skin-protective properties. We speculated that addition of a tackifying agent (TA) to ceramide 2-containing hydrocolloid dressings would increase their adhesiveness under dry conditions and reduce their adhesiveness under wet conditions because dry tack converts to wet tack after water absorption. Method: We prepared ceramide 2-containing hydrocolloid dressings with varying amounts of TA. Basic characteristics of the test ceramides dressings, such as initial tack force and peeling force, were evaluated using standard methods. Peeling force and stratum corneum (SC) removal on healthy human skin were also evaluated at 20 minutes, 7 hours, and 72 hours. In addition, the effect of 10 repeated applications on transepidermal water loss (TEWL) was investigated on the skin of hairless mice under dry and wet conditions. Statistical analyses were performed using one-way analysis of variance followed by Dunnett’s multiple comparison test. A p-value of

Full text: Available Mark Allen Group at Journal of Wound Care

44. Title: The prevalence, prevention and multilevel variance of pressure ulcers in Norwegian hospitals: A cross-sectional study

Citation: International Journal of Nursing Studies, Jan 2015, vol. 52, no. 1, p. 149-156, 0020-7489 (January 2015)

Author(s): Bredesen, Ida Marie, Bjørø, Karen, Gunningberg, Lena, Hofoss, Dag

Abstract: Pressure ulcers are preventable adverse events. Organizational differences may influence the quality of prevention across wards and hospitals. To investigate the prevalence of pressure ulcers, patient-related risk factors, the use of preventive measures and how much of the pressure ulcer variance is at patient, ward and hospital level. A cross-sectional study. Six of the 11 invited hospitals in South-Eastern Norway agreed to participate. Inpatients 18 years at 88 somatic hospital wards (N = 1209). Patients in paediatric and maternity wards and day surgery patients were excluded. The methodology for pressure ulcer prevalence studies developed by the European Pressure Ulcer Advisory Panel was used, including demographic data, the Braden scale, skin assessment, the location and severity of pressure ulcers and preventive measures. Multilevel analysis was used to investigate variance across hierarchical levels. The prevalence was 18.2% for pressure ulcer category I-IV, 7.2% when category I was excluded. Among patients at risk of pressure ulcers, 44.3% had pressure redistributing support surfaces in bed and only 22.3% received planned repositioning in bed. Multilevel analysis showed that although the dominant part of the variance in the occurrence of pressure ulcers was at patient level there was also a significant amount of variance at ward level. There was, however, no significant variance at hospital level. Pressure ulcer prevalence in this Norwegian sample is similar to comparable European studies. At-risk patients were less likely to receive preventive measures than patients in earlier studies. There was significant variance in the occurrence of pressure ulcers at ward level but not at hospital level, indicating that although interventions for improvement are basically patient related, improvement of procedures and organization at ward level may also be important. [PUBLICATION] 34 references

Source: BNI

45. Title: The thickness of exudate: does it matter?

Citation: British Journal of Community Nursing, Mar 2015, vol. 20, no. 3, p. S19., 1462-4753 (March 2015)

Author(s): Jones, June

Abstract: The majority of chronic wounds are managed in the community by the district nursing team. With increasing constraints on the health-care budget, it can be tempting to manage exudate by focusing solely on the exudate-handling capability of some of the more absorbent dressings available. However, exudate levels and viscosity can change depending on the patient and the wound, with exudate being a marker of potential infection. Ongoing assessment of the wound, the exudate and the patient is pivotal to effective wound management, with timely and appropriate intervention being key. This article discusses this management, with particular focus on dealing with thick exudate. [PUBLICATION] 19 references

Source: BNI

46. Title: Topical oxygen wound therapies for chronic wounds: a review

Citation: Journal of Wound Care, Feb 2015, vol. 24, no. 2, p. 53-63, 0969-0700 (February 2015)

Author(s): Dissemond, J., Kröger, K., Storck, M., Risse, A., Engels, P.

Abstract: Chronic wounds are an increasing problem in our ageing population and can arise in many different ways. Over the past decades it has become evident that sufficient oxygen supply is an essential factor of appropriate wound healing. Sustained oxygen deficit has a detrimental impact on wound healing, especially for patients with chronic wounds. This has been proven for wounds associated with peripheral arterial occlusive disease (PAOD) and diabetic foot ulcers (particularly in combination with PAOD). However, this is still under debate for other primary diseases. In the past few years several different new therapeutic approaches for topical oxygen therapies have been developed to support wound healing. These tend to fall into one of four categories: (1) delivery of pure oxygen either under pressurised or (2) ambient condition, (3)
chemical release of oxygen via an enzymatic reaction or (4) increase of oxygen by facilitated diffusion using oxygen binding and releasing molecules. In this review article, the available therapeutic topical oxygen-delivering approaches and their impact on wound healing are presented and critically discussed. A summary of clinical data, daily treatment recommendations and practicability is provided. [PUBLICATION] 76 references

Source: BNI
Full text: Available Mark Allen Group at Journal of Wound Care

47. Title: Treating a leg ulcer patient with complex comorbidities: a case study
Citation: British Journal of Community Nursing, Mar 2015, vol. 20, no. 3, p. S48., 1462-4753 (March 2015)
Author(s): Harman, Gillian
Abstract: Case study illustrating the care provided by the Lindsay Leg Club to a female patient with leg ulcers and comorbidities, and the impact that this has had on her life. [ORIGINAL] 3 references
Source: BNI
Full text: Available British Journal of Community Nursing at British Journal of Community Nursing

48. Title: Use of HBOT and a living bilayer skin substitute for a compromised flap with chronic steroid use: a case report
Citation: Journal of Wound Care, Jan 2015, vol. 24, no. 1, p. 34-40, 0969-0700 (January 2015)
Author(s): Pistorio, A.L., Leslie, J., Gustavson, R.B., Baynosa, R.C.
Abstract: Wound healing in a degloving injury can be compromised due to mechanical compression, increased length-to-width ratio, and time to treatment. Chronic steroid use is also a known risk factor for poor wound healing in wounds of any type. We report the first known case of hyperbaric oxygen therapy and Apligraf, a living bilayer skin substitute, for non-operative salvage of a traumatic degloving injury in 70-year-old female on chronic steroids for sarcoidosis. [PUBLICATION] 35 references
Source: BNI
Full text: Available Mark Allen Group at Journal of Wound Care

49. Title: Use of Silicone Materials to Simulate Tissue Biomechanics as Related to Deep Tissue Injury
Citation: Advances in Skin and Wound Care, Feb 2015, vol. 28, no. 2, p. 59-68, 1527-7941 (February 2015)
Author(s): Sparks, Jessica L, Vavalle, Nicholas A, Kasting, Krysten E, Long, Benjamin, Tanaka, Martin L, Sanger, Philip A, Schnell, Karen, Conner-Kerr, Teresa A
Abstract: Sparks et al evaluate the ability of silicone materials to mimic the distribution of stress in muscle tissue under concentrated loading. Indentation tests and the prototype patient simulator trial demonstrated similar trends with high pressures closest to the bony prominence with decreasing magnitude toward the interfacial surface. Qualitatively, silicone mimicked the phenomenon observed in muscle of nonuniform stress under concentrated loading. Although shear moduli were within biological ranges, stress and stiffness values exceeded those of porcine muscle. [PUBLICATION] 35 references
Source: BNI

50. Title: Use of a Novel Epidermal Harvesting System in Resource-Poor Countries
Citation: Advances in Skin and Wound Care, Mar 2015, vol. 28, no. 3, p. 107-112, 1527-7941 (March 2015)
Author(s): Serena, Thomas, Francius, Adler, Taylor, Cristin, MacDonald, John
Abstract: The 2010 earthquake in Port-au-Prince, Haiti, highlighted the need for wound care in resource-poor countries. Subsequently, the University of Miami in Florida established one of the first interprofessional wound care centers located at Bernard Mevis Hospital in the central portion of Port-au-Prince, caring for patients with acute and chronic wounds. In 2012, the authors used a novel epidermal harvesting system (CelluTome Epidermal Harvesting System; Kinetic Concepts Inc, San Antonio, Texas) to harvest epithelium to be grafted on 7 patients at the Mevis Hospital with longstanding wounds. Epidermal microblisters were obtained from each patient's thigh using the CelluTome Epidermal Harvesting System. After 35 minutes, microblisters were raised using the device harvester, and an adhesive dressing was inserted into the harvester for transfer to the wound site. In patients with lower-extremity wounds, a 2-layer compression dressing was placed over epidermal grafts. Six of the 7 wounds improved or achieved complete closure in 4 weeks. One of the patients with a 2-year-old thigh wound failed to demonstrate improvement; this may have been secondary to an inability to adequately secure the graft. All donor sites healed without any visible scarring. The authors were able to conclude that epidermal grafting may represent a viable reconstructive option for patients in resource-poor countries. [PUBLICATION] 13 references
Source: BNI

51. Title: What Is the Healing Time of Stage II Pressure Ulcers? Findings from a Secondary Analysis
Citation: Advances in Skin and Wound Care, Feb 2015, vol. 28, no. 2, p. 69-75, 1527-7941 (February 2015)
Author(s): Palese, Alvisa, Luisa, Saiani, Ilenia, Pota, Laquintana, Dario, Stinco, Giuseppe, Di Giulio, Paola
Abstract: Palese et al evaluate the healing time of Stage II pressure ulcers (PrUs). Two hundred seventy Stage II PrUs included, 153 lesions healed (56.7%), whereas 74
(27.4%) were still present after 10 weeks of follow-up. For 43 lesions (15.9%), the follow-up evaluation was interrupted because of patient death or transfer to units not included in the study. [PUBLICATION] 46 references

Source: BNI

52. Title: What is important to patients in wound management
Author(s): Keeton, Helen, Crouch, Robert, Lowe, Kate
Abstract: Traumatic wounds are a common reason for patients to attend emergency departments. There are many ways of managing these wounds from glue to suturing. The authors conducted a patient survey to identify the outcome measures most important to patients after closure of traumatic wounds. The results showed that having the least chance of infection was the most important outcome, followed by being looked after by caring staff and a quick recovery. These finding were consistent regardless of the anatomical location of the wound or age of the patient. This information is being used to guide the authors in the most appropriate outcome measures for further research. [PUBLICATION] 6 references
Source: BNI

Full text: Available Emergency medicine journal : EMJ at Emergency Medicine Journal

53. Title: Wound closure in patients with DFU: a cost-effectiveness analysis of two cellular/tissue-derived products
Citation: Journal of Wound Care, Mar 2015, vol. 24, no. 3, p. 149-156, 0969-0700 (March 2015)
Author(s): Gilligan, A.M., Waycaster, C.R., Landsman, A.L.
Abstract: Objective: Determine the cost-effectiveness of extracellular matrix (ECM) relative to human fibroblast-derived dermal substitute (HFDS) on diabetic foot ulcer (DFU) wound closure. Method: Outcomes data were obtained from a 12-week, randomised, clinical trial of adults aged 18 years or older diagnosed with type 1 or type 2 diabetes with a DFU. Patients were treated with either ECM or HFDS treatment. A two-state Markov model (healed and unhealed) with a 1-week cycle length was developed using wound-closure rates from the trial to estimate the number of closed-wound weeks and the expected DFU cost per patient. Results were recorded over 12 weeks to estimate the number of closed-wound weeks per treatment and the average cost to achieve epithelialisation (primary outcome). The perspective of the analysis was that of the payer, specifically the Centers for Medicare and Medicaid Services. No cost discounting was performed because of the short duration of the study. Results: The study consisted of 26 patients, with 13 in each group. In the ECM group, 10 wounds closed (77%), with an average closure time of 36 days; 11 wounds closed in the HFDS group (85%), with an average closure time of 41 days. There was no significant difference between these results (p=0.73). Over 12 weeks, the expected cost per DFU was $2522 (£1634) for ECM and $3889 (£2524) for HFDS. Patients treated with HFDS incurred total treatment costs that were approximately 54% higher than those treated with ECM. Sensitivity analyses revealed that the total cost of care for two applications of HFDS was more costly than eight applications of ECM by approximately $500 (£325). Conclusion: In patients with DFU, ECM yielded similar clinical outcomes to HFDS but at a lower cost. Health-care providers should consider ECM as a cost-saving alternative to HFDS. [PUBLICATION] 40 references
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