[OP019] THE USE OF DEHYDRATED HUMAN AMNIOTIC/CHORIONIC MEMBRANE FOR TREATMENT OF RECALCITRANT WOUNDS

Allison Shen[1], Garden City, United States , Thomas Davenport[1], Garden City, United States

[1]*Long Island Plastic Surgical Group*

Wednesday, May 13, 2015

Free Paper Session: Dressings

Aim: Recalcitrant wounds often fail to respond to the standard of care, prompting physicians to employ alternate treatment modalities to promote healing. In recent years, dehydrated human amniotic/chorionic membrane (DHACM) has emerged as an intriguing treatment option for such wounds due to its high content of bioactive molecules. This study assessed the 6-month outcomes of patients who received DHACM* for wounds that were previously unresponsive to standard of care therapy for 6 months or more.

Method: This retrospective chart review examines the 6-month outcomes of patients who received DHACM* for the treatment of wounds that failed to respond to standard of care treatment for at least 6 months or more. Our patient cohort was drawn from the practice of a single physician with referrals from multiple wound care centers. All patients had received standard of care treatment for their diagnosis for 6 months or more prior to receiving DHACM* treatment. Patient charts were examined to determine their outcomes 6 months after beginning DHACM treatment*.

Results / Discussion: Seven patients (4 male, 3 female) were included in this study. The average patient age was 65.9 years (range 19 to 87 years). All 7 patients, each of whom received 1 or more DHACM* applications after at least 6 months of failing to respond to standard of care treatment, experienced wound healing 6 months after treatment with DHACM*.

Conclusion: Our findings suggest that DHACM may be a viable and effective option for the promotion of healing of recalcitrant wounds.

*EpiFix®; MiMedx Group, Inc., Marietta, GA

[OP020] PROPHYLACTIC USE OF SOFT SILICONE FILM PREVENTS RADIATION-INDUCED MOIST DESQUAMATION

Patries Herst[1], Wellington, New Zealand , Noelle Bennett[2], Dunedin, New Zealand , Annie Sutherland[2], Dunedin, New Zealand , Ruth Peszynski[2], Dunedin, New Zealand , Dean Paterson[3], Wellington, New Zealand , Marieke Jasperse[4], Wellington, New Zealand

[1]*University of Otago; Radiation Therapy*
[2]*Southern Dhb; Radiation Therapy*
[3]*Capital and Coast Dhb; Blood and Cancer Centre*
[4]*University of Otago; Psychological Medicine*

Wednesday, May 13, 2015

Free Paper Session: Dressings

Aim: We previously showed that soft silicone dressings used in a management setting decreased the severity of radiation-induced acute skin reactions in breast cancer patients by 40% but did not affect moist desquamation rates. Here we investigated whether the prophylactic use of a transparent soft silicone film would decrease moist desquamation rates.

Method: Datasets of 78 breast cancer patients receiving radiation therapy, recruited between October 2012 and April 2013 in one department, were analysed. Patient acted as their own controls to circumvent potentially confounding treatment and patient related factors. Lateral and medial halves of the skin areas to be irradiated were randomized to silicone film or aqueous cream; the film was applied by the radiation therapist and stayed in place for 1 or 2 weeks, aqueous cream was applied by the patient twice a day. Skin dose was determined by thermoluminescent dosimeters. Skin reaction severity was assessed using RISRAS and RTOG scales.

Results / Discussion: RISRAS analysis showed that the silicone film reduced overall skin reaction severity by 92% ($p<0.0001$). All patients developed some form of reaction in cream-treated skin which progressed to moist desquamation in 26% of patients (RTOG grades I: 28%; IIA: 46%; IIB: 18%; III: 8%). Only 44% of patients had a skin reaction under the film, which did not progress to moist desquamation in any of the patients (RTOG grades I: 36%; IIA: 8%).

Conclusion: Soft silicone film completely prevented moist desquamation from developing and reduced skin reaction severity by 92% when used prophylactically in this cohort.

[OP021] OBSERVATIONAL STUDY OF THE CLINICAL PERFORMANCE OF A HYDRO-DESLOUGHING ABSORBENT DRESSING FOR HEALING ACUTE AND CHRONIC WOUNDS (OPTIMAL STUDY)

Francois Allaert[1], Dijon, France

[1]*Medical Evaluation Chair Cenbiotech*

Wednesday, May 13, 2015

Free Paper Session: Dressings

Aim: To describe the clinical profile and the healing process of patients' wounds treated with hydro-desloughing absorbent dressings.

Method: Prospective observational study conducted in the daily ambulatory practice of medical practitioners and nurses. Patients presenting wounds were followed at inclusion, 2 weeks, 4 weeks and 6 weeks. The area of the wounds and its structure (necrosis, fibrinous, granulation and epithelial tissues) were reported on the study form.

Results / Discussion: 1410 patients (56.7% women) with an average age of 69.6 years were followed. Their wounds were mainly venous or mixed ulcers (41.2%), post-operative or post-traumatic wounds (25.9%), pressure sores (10.5%) and diabetic foot wounds (5.2 %). Wound surface decreased of 16.1% after 2 weeks, of 37.2% at 4 weeks and of 49.1% at 6 weeks ($p < 0.0001$). The necrotic tissue decreased from 8.4% to 0.6% of the wound area and the fibrinous tissue from 63.8% to 19.9%, while the granulation tissue increased from 23.8% to 41.9% and the epithelial tissue from 3.9% to 37.6% ($p < 0.0001$). These changes are statistically significant regardless of the type of wound, but vary according to the nature of the wound with an epithelialisation rate of 55.5% in acute wounds, of 33.7% in pressure sores, of 31.7% in diabetic wounds and of 27.0% in venous ulcers.

Conclusion: The absorbent and detergent properties of the hydro-desloughing dressing contribute to a rapid healing of chronic wounds and acute wounds.

[OP022] RESULTS OF A NATIONAL MULTICENTER TRIAL WITH A HYDRO-DESLOUGHING DRESSING

Christian Münter[1], Hamburg, Germany , Dimitrios Tsantilas[2], Augsburg, Germany , Patricia Wilken[3], Sulzbach, Germany , Udo Moller[4], Sulzbach, Germany

[1]*Gemeinschaftspraxis*
[2]*Praxis*
[3]*Urgo Medical; Managerin Key Opinion Leader&market Access D/A/Ch*
[4]*Urgo GmbH*

Wednesday, May 13, 2015

Free Paper Session: Dressings

Aim: Our trial aimed to demonstrate the efficacy and tolerance of a hydro-desloughing dressing in outpatients with all type of acute and chronic wounds.

Method: A prospective, open label, non-interventional multicentre trial was carried out. The main evaluation criterion was the percentage of healed wounds after 8 weeks. Secondary criteria were the evolution of wound surface area, level of exudate, evolution of PUSH-score, tolerance and acceptance of the dressing as well as pain on dressing removal.

Results / Discussion: 1.558 patients were included by 152 centres. 56,5 % of acute wounds healed after 28 days , 27,1 % of chronic wounds healed after 36 days. Level of exudate was rated better in 70,3 % at final visit. The median of the PUSH-score decreased by 9.0 for acute and 5.0 for chronic wounds. Median of surface of the chronic (acute) wounds decreased by 3,4 cm^2 (5,0 cm^2). Local tolerance was rated as very good (85,3 %) or good (13,6 %). The acceptance was rated very good (76,1 %) or good (22,1%). The dressing change was reported as pain free in 64,3 % and with mild, short pain in 30 ,3% of the cases at the final visit.

Conclusion: This trial showed very good results in terms of desloughing and healing in a high number of outpatients presenting acute and chronic wounds.

[OP023] RANDOMIZED CONTROLLED TRIAL COMPARING THE COMBINATION OF A POLYMERIC MEMBRANE DRESSING PLUS NEGATIVE PRESSURE WOUND THERAPY AGAINST NEGATIVE PRESSURE WOUND THERAPY ALONE: THE WICVAC – STUDY

Edda Skrinjar[1], Wien, Austria , Ojan Assadian[2], Wien, Austria , Nikolaus Duschek[3], Vienna, Austria , Gottfried Sebastian Bayer[3], Vienna, Austria , Spyridon Koulas[3], Vienna, Austria , Kornelia Hirsch[3], Vienna, Austria , Jürgen Falkensammer[3], Vienna, Austria , Afshin Assadian[3], Vienna, Austria

[1]*Abteilung Für Vasculäre und Endovasculäre Chirurgie, Wilhelminenspital Wien*
[2]*Universitätsklinik Für Hygiene und Infektionskontrolle*
[3]*Wilhelminenhospital; Vascular and Endovascular Surgery*

Wednesday, May 13, 2015

Free Paper Session: Dressings

Aim: The treatment of chronic wounds requires time and resources. Optimized resource utilization in treatment of chronic wounds is of medical and economic interest. This study was designed to investigate the effect of an additional polymeric membrane interface dressing* in negative pressure wound therapy (NPWT) on the number of required dressing changes in comparison to NPWT alone until wound closure as the primary endpoint.

Method: From October 2011 to April 2013, 60 consecutive patients with chronic wounds of lower extremities or surgical site infections after revascularization were randomly allocated to either treatment with conventional NPWT (VAC arm, control) or NPWT with additional polymeric interface dressing (VAC + polymeric membrane interface dressing*, WICVAC, study arm). The polymeric membrane dressing was applied as direct wound contact layer, covered with the Polyurethane Foam Dressing of the NPWT. Secondary endpoints were: time to heal and wound associated pain.

Results / Discussion: 47 patients completed follow-up. Patients with additional interface dressing required significantly less dressing changes (WICVAC arm: 2.9 ± 2.7, VAC arm: 4.5 ± 2.9, P = 0.038). VAS scores were higher in patients randomized to VAC (4.8 ± 2.9) compared to WICVAC (3.0 ± 2.9, P = 0.063), although these results were statistically not significant. After 30 days of treatment no significant difference in the wound closure rate (P > 0.05) was observed.

Conclusion: The combination of NPWT and a polymeric membrane interface dressing*is a save method for the treatment of chronic wounds requiring significantly fewer dressing changes to achieve a comparable wound healing rate, thus reducing patients discomfort and use of resources.

* PolyMem® WIC

[OP024] LEUCOCYTE-PLATELET RICH FIBRINE (L-PRF) IN THE TREATMENT OF CHRONIC WOUNDS

Nelson Pinto[1], Concepcion, Chile , Gregor Pinto[2], Chillan, Chile , Yelka Zamora[3], San Jose, Costa Rica

[1]*Castellon 194*
[2]*Hospital Herminda Martin; Home Care Unit*
[3]*Clinica Ruisanchez; Advance Wound Care*

Wednesday, May 13, 2015

Free Paper Session: Dressings

Aim: To evaluate the adjunctive benefits of a topical application of leucocyte- and platelet-rich fibrin (L-PRF), in the management of chronic wounds that affect soft and/or hard tissues refractory to standard therapy.

Method: 105 consecutive patients suffering from chronic wounds affecting soft and/or hard tissue refractory to standard treatment were treated with local application of leucocyte- and platelet-rich fibrin (L-PRF). The study involves the participation of three advanced wound care centers. Three doctors one in each center received prior specific training to ensure uniformity in the procedure. The wounds were treated weekly with L-PRF membranes until complete closure. The study period was September 2010 to December 2013. Changes in wound area were recorded longitudinally via digital planimetry. Adverse events and pain levels were also registered.

Results / Discussion: 98 patients follow the treatment until complete healing. 7 patients discontinue the treatment for reasons not related to treatment. The median follow up period was 22 months (12- 39 months).During this follow up time 88 (95.6%) wounds remain closed. No adverse effects were recorded. Significant improve on pain scale was observed. Histological and clinical findings show a high level or regeneration instead of scar tissue.

Conclusion: Application of L-PRF on chronic ulcers refractory to standard wound care, promotes healing.

L-PRF not only promotes wound closure, buts helps to achieve a better quality of the regenerated tissue with may explain the low recurrence.

This new therapy is simple, safe and relatively inexpensive.