REVISTA ENFERMAGEM ATUAL IN DERME

WINNERS OF THE "DR. WALTER SOARES PINTO" E-POSTER AWARD AT THE SGAWCM 2021 – SOBRATAFE GLOBAL ADVANCED WOUND CARE MEETING 2021

GANHADORES DO PRÊMIO "DR. WALTER SOARES PINTO" DE E-POSTER NO SGAWCM 2021 – SOBRATAFE GLOBAL ADVANCED WOUND CARE MEETING 2021

MODALITY: ACADEMICS

397580 - MEROPENEM PHARMACOKINETICS CHANGES DURING THE SEPTIC SHOCK WITH IMPACT ON COVERAGE BASED ON PK/PD APPROACH IN CRITICALLY BURN PATIENTS

Claudia G Messiano[1] * Elson M Silva Junior[2] * João Manoel da Silva Junior[2] * Edvaldo V Campos[2] * Amanda M R R Oliveira[2] * Aline S Gomides[2] * Gabriela A Ferreira[2] * Thiago C Oliveira[2] * David de Souza Gomez[2] * Silvia R C J Santos[1]

1 Clinical Pharmacokinetics Center, School of Pharmaceutical Sciences, University of Sao Paulo, Brazil.

2 Division of Plastic Surgery and Burns, HCFMUSP, Medical School; University of Sao Paulo/SP, Brazil

Introduction: Physiological change that occurs during the time course septic shock in burn patients can alter pharmacokinetics (PK) of hydrophilic beta-lactam agents, which could impact the desired outcome in ICU patients undergoing meropenem therapy [1]. Rational of study was to investigate PK changes during the time course of therapy of septic shock in burn patients receiving meropenem 1g q8h by 3hrs-extended infusion that could impact the desired outcome. **Methods:** Ethical approval was obtained, and the consent forms were signed before the study starts. Ten burn patients undergoing intensive care therapy with preserved renal function were included. Cultures were collected prior to starting the antimicrobial therapy. Blood was sampling (1.5 mL/each) at the steady state, at the 3rd and at the 5th of infusion starts 1g q8h, for drug serum measurement by liquid chromatography in three consecutive periods as follows: Set 1 at the 3rd day, Set 2 at 10th day, Set 3 at 17th day [2]. PK data was based on noncompartimental data analysis in burn patients by comparison with results previously described in healthy volunteers [3]. Furthermore, pharmacokinetics data obtained from each patient were compared between Sets. Predictive index of drug effectiveness was based on %fΔT>MIC for therapeutic target considered of 100%fΔT>MIC. **Results:** Characteristics of patients (7M/3F) included were as follows: 37 yrs, 75 kg, 34% total burn surface area, SAPs score 53, medians. Inhalation injury, mechanical ventilation and vasopressors requirements occurred in 8/10 patients undergoing therapy of septic shock with meropenem 1g q8h, extended 3hr infusion. Patients received 42 mg/kg (39-43 mg/kg) daily dose equivalent to dose regimen of 14.5 mg/kg (13-14 mg/kg) q8hr, medians (quartiles). It was shown a prolongation of elimination half-life and increases by trice on the volume of distribution at the earlier stage of septic shock (Set 1) with positive impact on drug effectiveness. It is important to highlight that PK changes were reduced in the subsequent period (Set 2); in Set 3 data from patients were comparable with values reported in healthy volunteers. Then, target was attained for all septic burn patients in Set 1 and in Set 2 against gram-negative strains up to MIC 4mg/L and reduced to 8/10 patients in Set 3. **Conclusion:** It is important to highlight that meropenem 1g q8h must be prescribed at the

REVISTA ENFERMAGEM ATUAL IN DERME

onset of septic shock with the strategy of extended infusion, since the antimicrobial coverage will be guaranteed up to 9-10 days of therapy. Consequently, desired outcome was impacted by meropenem PK-changes during the time course of septic shock in burn patients (Sets 1-2) by eradication of pathogens isolated, and cure of infection. Then, drug prescription soon and PK/PD approach is an important strategy to avoid microbial resistance.

Keywords: Pharmacokinetics Changes; Septic Shock; Outcome; Serum Monitoring of the Meropenem; PK/PD Approach.

REFERENCES

1Carlier M. et al. Assays for therapeutic drug monitoring of beta-lactâmics antibiotics:A structure review. Int. J. Antimicrob. Agent. 2015;46:367-75.

2 Jaruratanasirikul S, Sriwinyajan S. Stability of meropenem in normal saline solution after storage at room temperature. Southeast Asian J Trop Med Public Health. 2003;34(3):627–9.

3 Santos SRCJ, Sanches-Giraud C, De Souza FF. Gómez DS. Campos RV, Azevedo R, Ferreira M, Nascimento J. PhatmacoKinetic-pharmacpdymamic correlation for meropenem applied to a burn child using a bioanalytical liquid chromatographic method. Rev Portuguesa de Farmacoterpia. 2011;3(4): 224-32.

MODALITY: CASE REPORT OF GREAT SCIENTIFIC RELEVANCE

420065 - USE OF LOW-LEVEL LIGHT AND PHOTODYNAMICS THERAPIES IN THE TREATMENT OF PIODERMA GANGRENOUS INJURY

Maria Elena Echevarría Guanilo[1] * Paulo Roberto Boeira Fúculo Junior[1] * Alexsandra Martins da Silva[1] * Guilherme Luiz Pacher Schmitz[1] * Marlei Sangalli1 * Luis Gustavo Ferreira da Silva[2] * Leonardo Franco Pereira[2].

1 Federal University of Santa Catarina – UFSC
2 University Hospital Professor Polydoro Ernani de São Thiago

Objective: To report the treatment of a patient with pyoderma gangrenous lesion by using low-level light and photodynamic therapies. **Case report:** Male, 36 years old, attended at a plastic surgery outpatient service, showing a 14x8cm lesion on the inner side of the right leg and a second one of 34.5x17.5cm on the anterior surface of the left leg. He reports that the lesion started from a superficial hemorrhagic pustule, which appeared after skin trauma and evolved into a red-purple ulcerated lesion with the predominance of necrotic tissue, irregular margins, erythematous-violet and high borders, with an intense inflammatory process and complaint of severe pain. Past history includes rheumatoid arthritis and Klinefelter syndrome. The patient was treated by a rheumatology, endocrinology, plastic surgery and nursing team, from 3/20/2020 to 3/5/2021 that provided him with the pharmacological needs due to autoimmune disease (infliximab), with analgesic (tramadol hydrochloride and paracetamol/codeine) due to intense pain (Numerical scale pain assessment 0 to 10 = 9 / constant and throbbing), with broad-spectrum antibiotic therapy due to different conditions of infection of the lesions, who in addition required hospitalization and dressings (once a week) by the nursing team and received guidelines for home care. During this period, he had difficulties to adapt himself to the therapy with topical agents and autolytic enzymatic debridement or with hydro-fiber coatings with silver or foam with anti-inflammatory. In one year, there was a reduction in the

REVISTA ENFERMAGEM ATUAL IN DERME

extent of the lesions to 25x9cm and 9x8cm, of lesions with irregular surface, abundant exudate, intense edema (3+/4+) and the need for three hospitalizations and three debridements in the operating room. 7 On 3/12/2021, the adjuvant treatment with 100mw low-intensity laser has started through weekly application of combined therapy of 01 Joule Infrared (808nm) and 01 Joule Red (660 nm), on every 1cm from the edges and in the granulation tissue, followed by application of 1% methylene blue and irradiated with a red LED board for 10 minutes, and the choice of foam cover with silver of adhering silver. After two cycles of 10 laser applications once a week, the following results has been obtained: lesion dimensions decreased to 17.6x4.3cm (left leg) and 3.3x2.3cm (right leg), flat and regular surface, without need for further hospitalization or surgical approach, significant reduction of exudate (medium to small amount), pinkish and hydrated edges, perilesional/scar tissue with positive qualitative assessment regarding elasticity, hydration, and oiliness. The patient presents decreased edema in the legs (+/4+) and pain reduction (from nine to pain 4, when dressings are applied and zero during the day). **Conclusion:** It stands out the importance of the multidisciplinary approach and the use of adjuvant treatment in the healing of complex injuries.

Keywords: Low-Level Light Therapy; Photodynamic Therapy; Wounds and Injuries; Pyoderma Gangrenosum.

REFERENCE

1. Eran Shavit, Afsaneh Alavi, R Gary Sibbald, Pyoderma Gangrenosum: a Critical Appraisal. Adv Skin Wound Care. 2017 Dec;30(12):534-542. Doi: 1097/01.ASW.0000526605.34372.9e.

2. Maverakis E, Marzano AV, Le ST, Callen JP, Brüggen MC, Guenova E, Dissemond J, Shinkai K, Langan SM. Pyoderma gangrenosum. Nat Rev Dis Primers. 2020 Oct 8;6(1):81.

3. Dungel P, et al. Low-level light therapy by LED of different wavelength induces angiogenesis and improves ischemic wound healing. Lasers Surg Med. 2014. PMID: 25363448.

4. Avci P, Gupta A, Sadasivam M, Vecchio D, Pam Z, Pam N, Hamblin MR. Low-level laser (light) therapy (LLLT) in skin: stimulating, healing, restoring. Semin Cutan Med Surg. 2013 Mar;32(1):41-52.

MODALITY: EXPERIMENTAL WORK

403313 - OZONE THERAPY TRANSCUTANEOUS VERSUS FOTOBIOMODULATION IN TREATING BURN

Juliana Balbinot Reis Girondi[1] * Felipe Duarte[1] * Julia Grisard de Bem1 * Carla do Rosário[1] * Milena Ronise Calegari[1] * Lucia Nazareth Amante[1] * Cilene Fernandes Soares[1] Luciara Fabiane Sebold[1]

1 Federal University of Santa Catarina

Objective: to compare the use of photobiomodulation with ozone therapy in the treatment of burns. **Method:** case study of a 40-year-old man without comorbidities presenting second-degree thermal burns caused by cooking oil in the left lower limb. Patient with severe pain, treated in May 2021 (10 days after the injury) at the plastic surgery team outpatient clinic (physician and residents, nurse and nursing students) of a teaching hospital in southern Brazil. Lesion measuring 748 cm² (44X17) in the anterolateral tibial regionextensive to the dorsum of the foot, toes and calf with 80% granulation and 20% sloughing; delimited, regular and adhered edges; perilesional area with maceration.

REVISTA ENFERMAGEM ATUAL IN DERME

Hygiene and instrumental debridement[1] was performed, weekly treatment was started with Low Intensity Laser (LLL) in 25 cm from the upper region of the lesion, frequency 660nm 1J by punctual technique (40 points), radiance 10J; and in the remainder of the wound, an ozone bag was used, dos and 90 mcg for 30 minutes. As primary coverage, hydrofiber with silver was used and, in the final stage of healing, gauze with petrolatum. At home, the dressings were performed by the wife, as instructed by the nursing team. A total of five consultations were carried out, from the third onwards, only ozone therapy was maintained, and after the fourth, the dose was changed from 90 mcg to 20 mcg. At outpatient discharge, the use of a 20-mmHg compression stocking was prescribed. The research was approved by the ethics committee for research with human beings. **Results:** In the area where it was applied only ozone transcutaneous by lowering bag was 30 cm 2 of total area after the first application, better vascularization, epithelialization and quality of the regenerated tissue. In total, five sessions of ozone therapy were performed with total tissue repair and outpatient discharge within four weeks. **Conclusion:** In the case described it is inferred that the Ozone therapy transcutaneous a bag showed better results the treatment of patients with burn especially having antimicrobial activity, given the exponential risk for these patients to infections and by decreasing oxidative stress due to the action on cytochrome C oxidase through its byproducts: reactive oxygen species (ROS) and lipid oxygenation products (LOPs). New clinical studies are suggested with expansion of the investigated sample and in new care contexts.
Keywords: Stomatherapy; Burns; Ozone; Low Intensity Light Therapy.

REFERENCE

1. Murphy C, Atkin L, Swanson T, Tachi M, Tan YK, Vega de Ceniga M, Weir D, Wolcott R. International consensus document. Defying hard-to-heal wounds with an early antibiolm intervention strategy: wound hygiene. J Wound Care 2020; 29(Suppl 3b):S1–28.

2. Associação Espanhola de Profissionais Médicos de Ozonoterapia (Madrid). Declaração de Madrid Sobre Ozonoterapia. 2010. Disponível em: http://www.spozonoterapia.com/pdf/portuguese_declaration.pdf.

3. Lima NEP, Gomes GDM, Feitosa ADNA, Bezerra ALD, Sousa MNA de. Laser therapy low intensity in wound care and practice nurses. Rev Enferm da UFPI [Internet]. 2018 May 13;7(1):50. Available from: http://www.ojs.ufpi.br/index.php/reufpi/article/view/6223

403315 - OZONE THERAPY IN THE THERAPEUTIC APPROACH TO THE MANAGEMENT OF LEUKOCYTOCLASTIC VASCULITIS

Juliana Balbinot Reis Girondi[1] * Felipe Duarte[1] * Julia Grisard de Bem[1] * Carla do Rosário[1] * Milena Ronise Calegari[1] * Lucia Nazareth Amante[1] * Cilene Fernandes Soares[1] Aldanea Norma de Souza Silvestrin[1]

1 Federal University of Santa Catarina.

Objective: To report a case of leukocytoclastic vasculitis treated with transcutaneous ozone therapy. **Method:** case study of a 74-year-old woman with type II Diabetes Mellitus, Systemic Arterial Hypertension, Depression and a history of allergy to diclofenac and ceftriaxone. Possible control of capillary blood glucose at home ranging between 150-200 mg/dl. Referred to the plastic surgery outpatient service (physician and residents, nurses and nursing students) of a teaching hospital in southern Brazil for the treatment of leukocytoclastic vasculitis in the lower limbs with a to clarify. In the first visit, in May 2021, he presented intense pain and lesions that permeated the entire length of the feet and ankles of both limbs, with the presence of ruptured blisters, large amounts of slough and seropurulent exudate, purpura and necrotic regions. No conditions to

REVISTA ENFERMAGEM ATUAL IN DERME

measure the lesions by the extension and clinical status of the patient. Wound hygiene was performed with polyhexamethylene biguanide solution and instrumental debridement. Weekly treatment started with transcutaneous ozone per bag, dose 90 mcg for 30 minutes. As primary coverage, hydrofiber with silver was used in the first visit, and foam with adhesive-edged silver and gauze with petrolatum in the others. At outpatient discharge, maintenance of hydration and general health care were prescribed. The research was approved by the ethics committee for research with human beings. **Results:** In the second visit in June 2021, patient with improvement in general condition and pain control. Significant reduction in injured areas: left limb with lesion in the malleolar region 4x3 (12 cm^2) with 95% granulation and 5% slough, right limb with lesion on the dorsum of the foot 8.5x4 (34 cm^2) 100% granulated. A total of four consultations were carried out, with the application of two sessions of ozone therapy in 21 days the lesions were completely healed. **Conclusion:** Ozone therapy was used in the adjuvant treatment to obtain the effects of antimicrobial activity, increased angiogenesis, modulation of inflammation, decrease stress of oxidative cell, promotion of analgesia and regulation of cellular metabolism. These associated factors favored healing quickly and effectively, in addition to providing a better quality of life for the patient. New clinical studies are suggested with the expansion of the investigated sample and in new care contexts.

Keywords: Stomatherapy; Ozone; Cutaneous Leukocytoclastic Vasculitis.

REFERENCE

1. Gonçalves MS. Vasculites: desafio diagnóstico e terapêutico. Arq Catarinenses Med [Internet]. 2019;48(4):174–90. Available from: http://www.acm.org.br/acm/seer/index.php/arquivos/article/view/531/388

2. Murphy C, Atkin L, Swanson T, Tachi M, Tan YK, Vega de Ceniga M, Weir D, Wolcott R. International consensus document. Defying hard-to-heal wounds with an early antibiolm intervention strategy: wound hygiene. J Wound Care 2020; 29(Suppl 3b):S1–28.

3. Girondi J, et al. Ozonioterapia no tratamento de feridas em adultos: revisão integrativa. Brazilian J Dev [Internet]. 2021; 7 (7): 68912–25. DOI: 10.34117/bjdv7n7-191.

MODALITY: HEALTH PROFESSIONALS BASIC CAREER WORK

397070 - ASSOCIATION OF HYPERBARIC OXYGEN THERAPY AND LASER THERAPY IN THE HEALING OF ACHILLES TENDON RUPTURE

Rauza Bretas Beck[1]

1 Institute of Hyperbaric Medicine of Brazil

Introduction: Achilles tendon injury can result in poor quality of life for the patient due to its functional mobility. In addition, it is a great challenge for the health team to work on the regeneration of this injury and functional rehabilitation. Among the new technologies available for the treatment of wounds is hyperbaric oxygen therapy (HBOT), which consists of the application of 100% oxygen in hyperbaric chambers, aiming at systemic hyperoxia in the body, accelerating the healing process. Laser therapy also emerges as a new technology in the treatment of wounds which, together with hyperbaric effects, enhances local action by acting on cellular and biochemical events. **Objective:** To describe the benefits of the association of hyperbaric oxygen therapy and laser therapy in the healing of Achilles tendon rupture. **Method:** This is a qualitative research of the type experience report. The case was experienced by a nurse in a private HBOT clinic/RS. The ethical precepts were met, the patient signed the informed consent authorizing her images and case report.

REVISTA ENFERMAGEM ATUAL IN DERME

Result: A 56-year-old female patient, with a history of hypertension and controlled Diabetes Mellitus, underwent 3 surgeries after the Achilles tendon rupture and 3 more surgeries after starting treatment with HBOT for complete removal of the nylon thread, which was causing a rejection by the body itself. The last surgery was performed on 20/06/21, in which the lesion measured 8.0x 2.0 cm with granulation tissue in the center and a medium amount of serous exudate. After performing 53 sessions of HBOT, the lesion was cleaned with heated SF0.9%, and the 1st session of laser therapy was performed using 0.5 joules of red laser in the path of the points and 2 joules of infrared at cardinal points in the granulation region. The wound was closed with rayon gauze, sterile gauze and bandage. The same procedure was repeated on 27/06/21, 02/07/21, 09/07/21/, 16/07/21 and 30/07/21. On 08/07/21 the stitches were removed. The treatment was completed with 6 sessions of laser therapy and 72 sessions of HBOT with good progress on the lesion, epithelialized tissue, measuring 0.5 cm without exudate. **Conclusion:** Favorable developments were found when combining the two measures, enhancing what the therapeutic literature has been showing in relation to the benefits of the combine measures. Exposure to high concentrations of O^2 increase oxygen saturation, forming neoangiogenesis and fibroblast proliferation. This added to the stimulation of local laser therapy increase the production of adenosine triphosphate (ATP), accelerating the healing process.

Keywords: Hyperbaric Oxygenation; Lasers; Healing.

REFERENCE

1. Alves P. et al. Oxigenoterapia hiperbárica no processo de cicatrização de feridas: uma revisão de literatura. Rev Enfermagem atual in derme. 2020;93(31). Disponível em: http://revistaenfermagematual.com.br/index.php/revista/article/view/610

2. Barros DMK. tratamento da rotura crónica do Tendão de Aquiles. Mestrado integrado de medicina. U. Porto. Porto, 42 pag. 2019. https://repositorio-aberto.up.pt/bitstream/10216/121269/2/343662.pdf.

3. Lucena AF, et al. Laser em feridas: translação do conhecimento para uma pratica efetiva e inovadora na enfermagem. Rev. Gaúcha Enferm. 2021; 42:e20200396. Disponível em: http://revista.cofen.gov.br/index.php/enfermagem/article/view/2375/766

MODALITY: HEALTH PROFESSIONALS CASE SERIES

382924 - ASSOCIATION BETWEEN ANTIMICROBIAL PHOTODYNAMIC THERAPY AND PHOTOBIOMODULATION IN THE HEALING PROCESS OF SKIN WOUNDS IN DOG (CANIS LUPUS FAMILIARIS)

Fernando Alzamora Filho[1] * Miriam Pinto Cavalcante[2] * Larissa Oliveira Nepomuceno[3] * Bruna Guedes de Carvalho[4] * Manoel Luiz Ferreira[5]

1- Departamento de Ciências Agrárias e Ambientais, Curso de Medicina Veterinária da Universidade Estadual de Santa Cruz (UESC), Ilhéus, BA, Brasil. E-mail: fafilho@uesc.br.

2-Médica Veterinária, BA, Brasil.

3-Discente do Curso de Medicina Veterinária da UESC, bolsista do Projeto Iniciação à Docência. Ilhéus – Bahia.

4-Discente do Curso de Medicina Veterinária da Universidade do Grande Rio - Duque de Caxias, RJ, Brasil.

REVISTA ENFERMAGEM ATUAL IN DERME

5-Centro de Cirurgia Experimental, Departamento de Cirurgia. Faculdade de Medicina. Universidade Federal do Rio de Janeiro (UFRJ), Rio de Janeiro, RJ, Brasil

Introduction: Wounds are common in Veterinary Medicine and they can be of different forms and origins. The healing process is complex and can be influenced by local and systemic factors, interfering with the different stages of healing. Treatment depends on the type of wound to restore the injured tissue. Laser therapy can be used alone or associated with other therapies and the effects on tissue damage are analgesia, inflammation modulation, angiogenesis and tissue regeneration. Antimicrobial photodynamic therapy (aPDT) consists of the use of light, photosensitizer and oxygen, which generate reactive oxygen species and singlet oxygen, causing the microorganism to die. The objective was to publicize the use of laser therapy in a dog's skin wound. **Material and Methods:** Female Border Collie, 3 years old, weighing 18 kg, suffered trauma with skin laceration on the left thoracic limb. The edges were sutured, but there was dehiscence of the stitches within 24 hours. Second-intensity healing was recommended. Zinc oxide ointment (Alantol®) was administered daily, and antibiotic and anti-inflammatory for 5 days, cefadroxil (Cefa Sid®) and Meloxicam (Meloxivet®), respectively, were administered. On physical examination, a wound with a swollen and reddish border, an ulcerated area with devitalized tissue, serous exudate and 8.8 cm2 of injured area. It was decided to associate photobiomodulation. The laser irradiation dosimetric parameters were calculated according to the injured area and the sessions were three times a week. **Results:** Due to the high degree of contamination of the wound, aPDT was performed in the first session, red laser (λ = 660 nm), energy of 9J/point, pre-irradiation time of five minutes and 0.01% methylene blue. After 48 hours of the 1st session, the lesion showed a reduction in edema and erythema, granulation tissue in the wound bed, absence of exudate and a reduction of 3.8 cm^2 in the injured area. The second session was with red laser (RL) and infrared (λ = 808nm) (IRL), with the energy used being 0.5 J/point and 1 J/point, respectively. The 3rd session was introduced aPDT, because the patient had contaminated and injured the granulation tissue and at the edge of the lesion, they were irradiated with IRL, five points of 1J of energy. The next four sessions were with RL in the open area, energy of 0.5J/point and IRL in the edge, energy of 1J/point, with an interval between sessions of 48 hours. He observed a reduction in the open area, with the wound edge shifting to the center. On the 14th day, the healing process was almost entirely completed, with a crust area of 0.4 cm^2. **Conclusion:** Low-intensity laser therapy was effective in resolving the skin wound, modulating inflammation and accelerating tissue repair, in addition to corroborating the conventional therapy used initially, enhancing its effect.

Keywords: Healing; Photochemotherapy; Laser Therapy; Skin; Trauma.

REFERENCE

1 Bagnato VS, Kurachi C, Blanco KC, Inada NM. 2017. Antimicrobial Photodynamic Therapy. In: Hamblin MR, Sousa MVP, Agrawal T. (Eds). Handbook of Low-Level Laser Therapy. Singapore: Pan Stanford ublishing, pp.273-283.

2 Andrade FSSD, Clark RMO, Ferreira ML. 2014. Effects of low-level laser therapy on wound healing. Revista do Colégio Brasileiro de Cirurgiões. 41(2): 129-33.

3 Kaviani A, Djavid GE, Ataie-Fashtami L, Fateh M, Geodis M, Salami M, Zand N, Kashef N, Larijani B. 2011. A Randomized Clinical Trial on Effect of Low-Level Laser Therapy on Diabetic Foot Wound Healing: A Preliminary Report. Photomedicine and laser Surgery. 29(2): 109-114.

4 Langella LG, Casalechi HL, Tomazoni SS, Johnson DS, Albertini R, Pallotta RC, Marcos RL, Carvalho PTC, Leal-Junior ECP. 2018. Photobiomodulation therapy (PBMT) on acute pain and

inflammation in patients who underwent total hip arthroplasty-a randomized, triple-blind, placebo-controlled clinical trial. Lasers Medicine Science. 33(9): 1933-1940.

388491- MANAGEMENT OF SURGICAL WOUND DEHISCENCE IN A SPECIALIZED WOUND CARE CENTER: A CASE SERIES

Evelin Santos Figueiredo Lima[1] * Arthur César Pacheco Lopes[2,3] * Tammila de Lima Almeida[4] * Ana Flávia Novaes[2] * Luciana Moreira Lopes[4] * Laís Oliveira Lima Barbosa[2] * Joubert Felipe Luz Costa Brito[2] * Mariana Masimessi Fernandes[2] * Raquel Araujo da Silva Carneiro[2] * Thiago de Carvalho Milet[1] * Bianca Tanajura Oliveira Bastos[3]

1- Health Department of the State of Bahia.

2- Federal University of Bahia.

3- Cicatrimed Comprehensive Wound Treatment

4- Santo Agostinho Health Faculty.

Introduction: Surgical wound healing is the result of an orderly sequence of physiological events. A mechanical failure or failure in wound healing at the surgical site may evolve with the emergence of complications such as suture dehiscence. Specialized wound care has revolutionized the healthcare landscape. This revolution also extends to the treatment of surgical wound dehiscence, which is a prevalent health problem. **Objective:** The aim of this study was to describe a series of cases of patients with surgical wound dehiscence admitted to Cicatrimed, a center specialized in wounds in the city of Vitória da Conquista, Bahia. **Methods:** The work was structured based on the CARE case report guideline. Demographic information, symptoms, and patient history were used to describe the cases. The therapeutic tools used were described using schedules. The evolution of the wounds was described using images and clinical characteristics. **Results:** We described 7 cases of postoperative suture dehiscence in patients with the following diagnoses: post-abdominoplasty dehiscence, mammoplasty with prosthesis insertion, saphenectomy, hand trauma and secondary amputation of diabetes mellitus. In all, there are remarkably satisfactory results with multidisciplinary treatment, hyperbaric oxygen therapy and other wound care technologies. **Conclusions:** Its concluded that the specialized and comprehensive treatment of wounds has a potentially favorable role in the care of patients with surgical wound dehiscence, given the positive results from the use of different therapeutic instruments and, unfortunately, still not widespread in the care environment as a whole.

Keywords: Surgical wound healing; suture dehiscence; multidisciplinary treatment

REFERENCE

1 Radowsky JS. et al. Preclosure spectroscopic differences between healed and dehisced traumatic wounds. PloS one, v. 13, n. 9, p. e0204453, 27 set. 2018.

2 ramczykowski T, Schildhauer, T. Amputation und Prothesenversorgung – die untere ExtremitätZeitschrift für Orthopädie und Unfallchirurgie, 2017. Disponível em: http://dx.doi.org/10.1055/s-0042-122394.

3 Sandy-Hodgetts K, Carville K, Leslie GD. Surgical wound dehiscence: a conceptual framework for patient assessment. Journal of wound care. Mar. 2018; 27(3): 119–26.

4 Sanford Guide. Sanford Guide to Antimicrobial Therapy. Sperryville, V; 2021.

5 Seidelman JL. et al. Serious superficial incisional surgical site infections (SSISSIs): A proposed surveillance definition. Infection control and hospital epidemiology: the official journal of the Society of Hospital Epidemiologists of America. 2019; 40(11).

6 Shah J. Hyperbaric oxygen therapy. The journal of the American College of Certified Wound Specialists. Apr. 2010; 2(1):

7 Smith CM. Debridement for Surgical Wounds. Critical care nurse, 2015; 35(4):75–6.

8 Molnar JA, Vlad LG, Gumus T. Nutrition and Chronic Wounds: Improving Clinical Outcomes. Plastic and reconstructive surgery. 2016;138(3S): 71S.

9 Nascimento LD. et al. Clinical and microbiological profile of diabetic foot ulcers infected with Staphylococcus aureus in a regional general hospital in Bahia, Brazil. The international journal of lower extremity wounds, p. 153473462110507, 6 nov. 2021.

10 Neaman KC, Hansen JE. Analysis of complications from abdominoplasty: a review of 206 cases at a university hospital. Annals of plastic surgery. 2007;58(3): 292–98.

11 Robert N. Negative pressure wound therapy in orthopaedic surgery. Orthop Traumatol Surg Res 2017 Feb;103(1S):S99-S103. doi: 10.1016/j.otsr.2016.04.018. Epub 2016 Dec 30.

12 Negut I, Grumezescu V, Grumezescu AM. Treatment Strategies for Infected Wounds. Molecules. 2018; 23(9):

13 Gao J. et al. Negative pressure wound therapy for surgical site infections: A systematic review and meta-analysis. Journal of advanced nursing. 2021; 77(10):

MODALIDATY: HEALTH PROFESSIONALS FOR CLINICAL WORK

409402 - ADVANCED WOUND HEALING WITH APPLICATION OF PRODUCTS WITH DIVERSIFIED PROPOLIS

Claudia Rodriguez[1] * Adrian Marichal[1] * Adrian Ramos[1] * Carla Burguez[1]

1 Wound Unit RAP (Primary Care Network) Canelones ASSE (State Health Services Administration) City Las Piedras, Uruguay

Introduction: In the understanding that we have in our country the industry and the raw material of elaboration of products derived from propolis, based on the evidence published in scientific articles that refer to the anti-inflammatory activity of propolis which is linked to the ability of its constituent polyphenols (flavonoids and aromatic acids) to inhibit NF-kB (nuclear transcription factor kappa-b) and reducing the levels of inflammatory mediators, this produces a decrease in inflammation, pain and microbial load, it is then that for this reason it was decided to clinically verify the efficacy of this product in complex wounds by conducting a descriptive, prospective crosssectional study. **Objective:** Demonstrate the efficacy of this active in controlling bacterial load, immunomodulation, pain, and wound healing. **Methods:** Descriptive, Prospective with cross-sectional. The method that will be used is the observation and assessment of the users, collection of data from the electronic medical record, individualized assessment instruments for each wound, wound measurements (MOWA, ACETATE) and EVA as a pain scale. Tolerance test. **Inclusion criteria**: Users who present Venous Ulcer, Pressure Ulcer and Diabetic Foot. **Results:** The study began on 2/1/2019, a cut is made on 1/6/21. Total 30 months. To date we have total patients 163 is broken down as

REVISTA ENFERMAGEM ATUAL IN DERME

follows: Abandonments because external reasons 5 users. Allergies 9 users. Deaths 11 (Cancer, Stroke, AMI, COVID) Referrals to Second Nivel of Care 8 users. Number of Completed Patients 130. **Conclusion:** So far we can say that if it is clinically verifiable the effectiveness of the products with propolis reduces pain, inflammation and therefore favors healing with a humid environment. It was possible to verify with practical scientific evidence the different combinations and uses of the products. The combination of Propolis Dressings with propolis in 2% Ointment has allowed to maintain a humid environment since the dressing absorbs the component and keeps the wound moist and in turn does not allow adhesion to the tissues in formation of the wound and therefore does not produce pain. In addition to the effectiveness against biofilm that was demonstrated by laboratory wound cultures. The combination of Calcium Alginate dressings moistened in Propolis Lotion has favored in the prolonged release of propolis in the bed does not allow adhesion because it is gelled and is also used under Unna boot therefore its change allows us to space up to 4 days. The use of Corticodress dressings has allowed us to lower hypergranulation and in some cases when propolis produces pain in combination with Propolis Ointment it has allowed us to lower the pain and be able to act on the biofilm together.

Keywords: Propolis; Pain; Inflammation; Immunomodulation; Cicatrization.

_____

REFERENCE

1- Pharmacological bases of the topical therapeutic use of propolis in burns (Q) and chronic ulcers (UC) of the skin. Dr. Newton Ross, former Associate Professor of Medicine and former Adjunct Professor of Pharmacology and Therapeutics. University of the Republic. Montevideo, Uruguay.

2- Leoni H, Artero G. Perafán M. The VJ Tower. Use of non-stick dressings in the healing of wounds and areas that give and receive skin grafts. Argentine Journal of Plastic Surgery 2007

3-Leoni HT, Duh MN, Olivero Vila F, Yohena R. Use of topical immunomodulators in vasculitic ulcers. Revista Argentina de Cirugía Plástica 2011;17(2):76-81.

4- Kumazawa S, et al. Studies of the constituents of Uruguayan propolis. J Agric Food Chem 2002;50:4777-82.

5- Marinel.lo Roura J, Verdú Soriano J (Coord.). National Consensus Conference on Lower Extremity Ulcers (C.O.N.U.E.I.). Consensus document 2018. 2nd ed. Madrid: Ergon; • Polit, Denise. Scientific Research in Health Sciences, Interamericana McGraw Hill.

388016 - CLINICAL PARAMETERS FOR ASSESSMENT SKIN OILINESS IN SURGICAL PATIENTS

Karla P. P. dos Santos[1 *] Suzinara B. S. De Lima[1] * Lidiana B.T. D. Silveira[1] * Bruna R. Pozzebon[1] * Rhea S. de Á. S[2 *] Thaís D. Eberhardt[3]

1 Universidade Federal de Santa Maria

2 Colégio Politécnico da Universidade Federal de Santa Maria

3 Universidade de Passo Fundo

Objective: To evaluate the skin oiliness of the cutaneous sites (heel and instep) of patients in the operating room. **Method:** This is a secondary analysis of a randomized clinical trial (RCT) carried out at a university hospital in southern Brazil from March 2019 to February 2020, with patients undergoing elective cardiac and gastrointestinal surgery. The variable oiliness was collected at the beginning of surgery - baseline, measured in the center of the heel and instep, using a bioelectrical

REVISTA ENFERMAGEM ATUAL IN DERME

impedance skin analyzer and the measurement was given in percentage (%). The analysis was performed by protocol, with the aid of the Statistical Package for Social Sciences (SPSS) version 21 software. A descriptive analysis of the data was performed, the normality of the variables was tested using the Shapiro-Wilk test. To assess the relationship between skin oiliness and skin sites, the Wilcoxon test was performed (absence of normal distribution, paired data). To assess the correlation of skin oilinesss between cutaneous sites, Spearman's test was performed. Values of r from 0.90 to 1.00 were considered a very high correlation; high from 0.70 to 0.90; moderate from 0.50 to 0.70; low from 0.30 to 0.50; and insignificant from 0.00 to 0.30[1]. A significance level of 5% was considered. The study was approved by the Ethics Committee with a Certificate of Presentation for Ethical Review 77103617.6.0000.5346 and registered on the platform of the Brazilian Registry of Clinical Trials (ReBEC), being approved under the identifier RBR-5GKNG5. **Results:** One hundred and thirty five patients were analyzed, 270 heels and 270 insteps, with 91 (67.4%) patients undergoing cardiac surgery and 44 (32.6%) gastrointestinal; the majority (n=107; 79.3%) had some comorbidity. The median of skin oiliness on the heel (22.6%) and on the instep (29.2%) showed a statistically significant difference (p-value <0.001) and a low positive correlation (r=0.339; p-value <0.001). **Conclusion:** It was identified that the oiliness of the heel is lower than that of the instep. Furthermore, the correlation is positive between the cutaneous sites, that is, the greater the heel skin oiliness, the greater the instep skin oiliness. In this sense, the nursing team can use the instep oiliness as a comparison region for the heel oiliness. It is noteworthy that the skin oiliness can reduce the skin tolerance to external forces such as friction, favoring the development of pressure injuries[2].

Keywords: Perioperative Nursing. Pressure Ulcer. Skin. Heel.

REFERENCE

[1.] Mukaka MM. A guide to appropriate use of Correlation coefficient in medical research. Malawi Medical Journal. Sep 2012; 24(3):69-71. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576830/. Acesso em: 20 jul 2021.

[2.] Bunsell AR. (Ed.). Handbook of Properties of Textile and Technical Fibres. 2nd. ed.2018.