WORKSHOP | DAY 1
December 05, 2022

ICWDO 2022





6th International Conference on

WOUND CARE, DERMATOLOGY AND ORTHOPEDICS

December 05-06, 2022 | Dubai, UAE

6th International Conference on

WOUND CARE, DERMATOLOGY AND ORTHOPEDICS

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Nature-based competency on innovative approach in wound care. The neudebri way

Annalyn Garcia
On Call Solutions International (Neumedis), Belgium

Recommendations & theory are best applied when health professionals are provided with a proper tool made available to the first line care-givers. We are endocrinated to just apply remedies and alopathic approach on wound care. NeuDebri Way is an important innovative approach to easily make us easily adopt sharp debridement as a primary therapy in standardized care in management in the first line.

The first thing, with the neudebri way, we take away what blocks or interfere the healing, as well as to enhance the regeneration of the missing elements to a healthy normal function on the skin. This suggests that education and training should be expanded for improvement and continue to reach out so that a treatment can be done at any place, at any time with no anesthetics.

A wound care treatment for timely resolution for faster healing and relief of pain, is unfailingly needed. With a reliable tool on its unique design, technique can be learned safely, precisely & accurately. When a continuity of care and team management combined with patient compliance with other methods is applied, healing takes place.

A global economic & social advantage for students, professionals, patients and the government itself is now available. To promote quality of life, prevent complication as well as eliminate high rates on amputation. Make your patients the frame of reference. They will be grateful of the right decision you make.

Recent Publications

1. Annalyn Garcia, Kenia Mission with FIT Belgium, 2022, The & wound-expertise Center, the very first & only First Line care center for neuropathic wounds was established in Belgium with her own initiatives in 2019.

Biography

Annalyn Garcia is a Filipina nurse migrated to Belgium for greener pasture who purely aimed to provide the best care has never planned to have her own private practice & own employees. Annalyn, a proud mother of two, a dedicated nurse, diabetes educator, especialized on treatment of neuropathic wounds has created an innovative tool is now ready to share the good news, with the truth that will give credit to our professional life as a doctor, nurse, podiatrist, dermatologist, surgeons. Due to the good results of her work and the patients as her frame of reference, neudebri is created.

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Scientific Tracks & Sessions | Day 1
December 05, 2022

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December 05-06, 2022 | Dubai, UAE

December 05, 2022

Wound Healing & Treatment | Burns & Wound Care | Tissue Regeneration | Dermatology & Aesthetic Science

Chair
Jasmina Begic
Bosnia and Herzegovina Association of Wound Management | Bosnia and Herzegovina

Session Introduction

Title: Bovine colostrum and wound healing

Simona Carniciu | University of Medicine and Pharmacy | Romania

Title: Intralesional cryosurgery for the treatment of hypertrophic scars and keloids – An evidence based new and novel technology

Yaron Har-Shai | Carmel Medical Center | Israel

Title: Analysis of the results of a preclinical study of physiological resorbable membranes based on a composition of polyvinyl alcohol with the addition of C_{60} fullerenes for targeted bone regeneration

Andrey V Kabankov | Military Medical Academy | Russia

Title: Use of synthetic epithelium in second degree burns for wound healing and tissue regeneration in children under 3 years old

Nimfa Jeraldine Buizon | Al Zahra Hospital Dubai | UAE

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Bovine colostrum and wound healing

Simona Carniciu
University of Medicine and Pharmacy, Romania

Exploitation of bovine colostrum and its derivatives is nowadays a research trend due to its natural presence of nutritious and physiologically active components such as hormones, immunoglobulins and growth factors. Bovine colostrum is bioactive due to proteins and peptides secreted into milk by the mammary glands. Using cutting-edge technology, it can be obtained a functional ingredient that results in an isolated, purified, or transformed constituents from colostrum with many medicinal uses. One of the most important targets human health as wound healing. Used as a dressing on wounds it stimulates the growth of the granulation tissue, reduces scars and exudates, provides pain relief, protects from infection. Among its components, for example Transforming Growth Factor β (TGF β) is stimulating the initial stages of repair, where surviving cells at the wound edge migrate over the damaged region to re-establish a continuous epithelial layer.

Chronic wounds have a negative impact worldwide, with huge medical costs for patients and an increased risk of mortality. These can be diverse, from burns to venous, arterial, or diabetic ulcers. Worldwide, diabetic foot ulcers represent a major health-care problem, especially an impaired wound healing. If these have a high bacterial load, that will delay the healing process. Clinical trials have reported that topical application of most growth factor on chronic wounds is for the most part unsuccessful because of their rapid degradation and extremely short half-life. The healing process is very complex and includes many stages. The normal skin wound healing is a complex process orchestrated by cytokines, GFs, clotting factors, prostaglandins, free radicals and nitric oxide. In diabetic patients these stages are altered, so different approach is needed. Aside of multidisciplinary team, the right topic treatment is the most important in treatment.

Recent Publications

1. Jafferany M, Mkhoyan R, Stamu-O'Brien C, Carniciu S. Nonpharmacological treatment approach in trichotillomania (hair-pulling disorder). Dermatol Ther. 2020 Jul;33(4):e13622.

2. Stamu-O'Brien C, Jafferany M, Carniciu S, Abdelmaksoud A. Psychodermatology of acne: Psychological aspects and effects of acne vulgaris. J Cosmet Dermatol. 2021 Apr;20(4):1080-1083.

3. Stamu-O'Brien C, Carniciu S, Halvorsen E, Jafferany M. Psychological aspects of COVID-19. J Cosmet Dermatol. 2020 Sep;19(9):2169-2173.

Biography

Simona Carniciu is a medical doctor and a PhD in diabetes, nutrition and metabolic diseases and graduate assistant in Carol Davila University of Medicine and Pharmacy, Bucharest, Romania. After many years of gaining experience in National Institute of Diabetes, Nutrition and Metabolic Diseases "N. Paulescu", Bucharest, Romania now she owns private clinic. She is also a treasurer at Romanian Medical Association, the most important medical association in Romania, founded in 1857 and a scientific secretary of a science journal in the Romanian Academy, Proceedings of the Romanian Academy Series. Is involved in education on lifestyle medicine, and a constant presence on scientific events and TV shows about medical subjects.

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Intralesional cryosurgery for the treatment of hypertrophic scars and keloids – An evidence based new and novel technology

Yaron Har-Shai
Carmel Medical Center, Israel

A novel cryoneedle (CryoShape, Life by Ice Ltd, Israel; approved by the FDA and Israel Ministry of Health) was inserted into the core of the hypertrophic scar and keloid (HSK). It was connected to a liquid nitrogen canister, which causes the cryoprobe to freeze thereby freezing the core of the HSK from the inside out.

This technology has been applied on patients suffering from HSK following: trauma, surgery, burns, piercing, acne and other. The scars were evaluated for volume reduction. Objective (hardness and color) and subjective clinical symptoms (pain/tenderness and itchiness/discomfort) were documented pre- and post- cryosurgery.

Pre- and post-treatment biopsies were taken for histomorphometric studies for collagen structure. Surface thermal behavior was measured by thermocouples. A significant long hold time was recognized. The histomorphometric analysis demonstrated collagen rejuvenation of the treated scars. Minimal post- cryosurgery hypopigmentation was documented.

For ear HSK, scar volume reduction of 70% has been achieved following a single cryo-session. On the chest 60% and upper back and shoulders 65%. 3% of scars did not respond. During the follow-up period significant alleviation of objective and subjective clinical symptoms was achieved. No worsening or infection of the HSK was noticed and only minimal hypopigmentation was documented. This simple to operate technology can be applied as an office procedure, is safe, cost-effective and possesses a short learning curve.

Recent Publications

1. Har-Shai Y, Har-Shai L, Zouboulis VA, Zouboulis CC. Different Types of Auricular Keloids and Treatment by Intralesional Cryosurgery: Best Practice for Obtaining Long-Lasting Clinical Results. Dermatology. 7:1-10, 2021.

2. Zouboulis CC, Wild T, Zouboulis VA, Har-Shai Y. Intralesional cryosurgery of keloids: Required treatment hold time. Br J Dermatol. 184:173-175, 2021.

3. Har-Shai L, Kreichman R, Kedar R, Osovsky M, Chen R, Lavi I, Metanes I, Segal M, Sar-El O, Mattar S, Hassan S, Kramer A, Bryzgalin L, Ad-El D, Sagi-Dain L, Lavie O, Har-Shai Y, Risk factors associated with accidental fetal skin lacerations during cesarean delivery, International Journal of Gynecology and Obstetrics, Published online June 2, 2022: ijgo.14273.

Biography

Yaron Har-Shai is a qualified plastic surgeon since 1992 and the director of the plastic surgery departments at Carmel and Linn Medical Centers at Haifa. Har-Shai is a graduate of the Ruth and Bruce Rappaport Faculty of Medicine, Technion- Israel Institute of Technology and is an active faculty staff member. At 2013 he was nominated as a clinical professor of plastic surgery at the Faculty of Medicine. To date Har-Shai is the vice dean for strategic development at the Bruce Rappaport Faculty of Medicine and the holder of the David Erlik Chair for surgery. Following his plastic and reconstructive surgery residency at Rambam Medical Center, Haifa, he had participated and attended many professional fellowships in the USA, Canada and Europe in the fields of facial aesthetic surgery, microsurgery, craniofacial and reconstructive surgery etc. Har-Shai is a past president of the Israel Society for Plastic Surgery and a corresponding member of the American and European Societies of Plastic Surgery. He has developed many innovative surgical procedures and published more than 100 original articles in basic sciences and clinical research, in addition to chapters in high quality textbooks, in the field of plastic, reconstructive and aesthetic surgery. Har-Shai was awarded prestigious prizes by the Israel Society for Plastic Surgery (Kaplan Prize and the President award), the Faculty of Medicine (distinguished lecturer), the European Tissue Repair Society and the International Society of Cryosurgery award for excellence for his achievements in the treatment of hypertrophic scars and keloids. Many of his articles are cited in the international medical literature and his innovations are applied in many medical centers around the world.

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Analysis of the results of a preclinical study of physiological resorbable membranes based on a composition of polyvinyl alcohol with the addition of C_{60} fullerenes for targeted bone regeneration

Andrey Kabankov and Aleksandr Ivanov
Military Medical Academy, Russia

C_{60} fullerenes are known to optimize wound processes. At the same time, most modern resorbed membranes, both heterogeneous and synthetic, have a certain inhibitory effect on osteogenesis. This is due to both their composition and the properties of their decay products. The study contains the results of the effect on osteogenesis of innovative physiological resorbable membranes of membranes based on a composition of polyvinyl alcohols with the addition of C_{60} fullerenes.

Recent Publications

1. Kaban'kov A.V, Ivanov A.S, Mnatsakanov S.S, Rumakin V.P, Reznichenko A.S. The peculiarities of the guided bone tissue regeneration on using resorbable membranes based on polyvinyl alcohol with the addition of C60 fullerenes. Russian Federation Vestnik VGMU. 2019;18(4):91-97.

2. Ivanov A.S, Kabankov. A.V, Mnatsakanov S.S. Toxicological characteristics of resordabl membranes based on polivinil alcohol with the addition of C60 fullerenes. The book of abstracts Internetional conference of experimental and numerical Investiganions and new technologies. – Serbia, 2020. – P. 21-23.

Biography

Andrey Kabankov has completed his PhD at the age of 25 years from the 1st Leningrad Medical Institute name N. I. Pavlov in 1976, residency in combined trauma. Currently the competitor of a scientific degree of candidate of medical Sciences at the Military Medical Academy. S. M. Kirov, Saint-Petersburg. He has over 40 publications.

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Use of synthetic epithelium in second degree burns for wound healing and tissue regeneration in children under 3 years old

Nimfa Jeraldine Buizon, Sergio Mazzei, Mahmoud Tabbal and Hussain Al Rahma
Al Zahra Hospital Dubai, UAE

Introduction: Burn injuries under 3 years old are 32% prevalent and most of these accidents happen at home. Burn management includes dressing changes which can be painful manifested by screaming and crying resulting to poor compliance with the treatment plan. This study involves the evaluation of synthetic epithelium (EpiProtect®), a biosynthetic cellulose dressing indicated for second degree burns on a 2 year old child.

Method: This is a case of 2 year old male infant with second degree burn with TBSA of 5.5%. Local toothpaste was used as a home remedy. The child was brought to ED where he was treated with local cream and bandage dressing. Two days after he was refered to wound care. Superficial to partial thickness burn on the left upper arm and left cheek without contractures were initially treated conservatively with superoxidized solution (Dermacyn), non-adherent dressing (Jelonet) and conforming bandage. The plan to use synthetic epithelium was discussed with the parents. EpiProtect® was applied 3 days after the first visit and the wound was re-assessed after 48 hours. Succeeding visits were between 3-5 days for follow up evaluation.

Results: The wound healed within 15 days with no scar formation. Hypopigmentation was present which will resolve in few weeks. Patient compliance and satisfaction was met.

Conclusion: Burn management in children require dressing changes which are painful and distressing. The case suggested that EpiProtect® is an advanced dressing that can be used to treat partial-thickness burns that provides immediate analgesia and can reduce the frequency of dressing changes

Recent Publications

1. Mazzei S, Sindoni A, Fama F, Buizon NJ, Shafei MA. Dehydrated human amnion/chorion membrane treatment of venous leg ulcers. Indian J Dermatol Venereol Leprol 2020;86:212-214

Biography

Nimfa Jeraldine Buizon is a double degree holder for biology and nursing. She graduated from University of the Philippines with biology degree and she earned her Bachelor's in Nursing from Arellano University in the Philippines. She has been a registered nurse for more than 10 years and is currently working as charge nurse for wound care in Al Zahra Hospital Dubai. She completed her International Interprofessional Wound Care Course (IIWCC) from University of Toronto last February 2021 and is currently engaged in different wound care and ostomy activities within her facility. She also established UAE Stoma Support Group in social media which aims to provide education for new ostomates.

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Young Researcher Forum | DAY 1
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Impact of silk hydrogel secondary structure on hydrogel formation, silk leaching and *in vitro* response for wound healing applications

Gemma Egan, Suttinee Phuagkhaopong, Saphia A L Matthew, Patricia Connolly and F Philipp Seib
University of Strathclyde, Scotland

Silk can be processed into a broad spectrum of material formats and is explored for a wide range of medical applications, including hydrogels for wound care. The current paradigm is that solution-stable silk fibroin in the hydrogels is responsible for their therapeutic response in wound healing. Here, we generated physically cross-linked silk fibroin hydrogels with tuned secondary structure and examined their ability to influence their biological response by leaching silk fibroin. Significantly more silk fibroin leached from hydrogels with an amorphous silk fibroin structure than with a beta sheet-rich silk fibroin structure, although all hydrogels leached silk fibroin. The leached silk was biologically active, as it induced vitro chemokinesis and faster scratch assay wound healing by activating receptor tyrosine kinases. Overall, these effects are desirable for wound management and show the promise of silk fibroin and hydrogel leaching in the wider healthcare setting.

Recent Publications

1. Matthew S.A.L, Egan G, Witte K, Kaewchuchuen J, Phuagkhaopong S, Totten J.D, Seib F.P. Smart Silk Origami as Eco Sensors for Environmental Pollution ACS Appl. Bio Mater. 2022, 5, 8, 3658–3666.

2. Egan G, Phuagkhaopong S, Matthew S.A.L, Connolly P, Seib F.P. Impact of silk hydrogel secondary structure on hydrogel formation, silk leaching and *in vitro* response. Sci Rep 12, 3729 (2022).

3. Matthew S.A.L., Totten J.D, Phuagkhaopong S, Egan G, Witte K, Perrie Y, Seib F.P. Silk Nanoparticle Manufacture in Semi-Batch Format. ACS Biomaterials Science & Engineering. 2020, 6(12), 6748-6759.

Biography

Gemma Egan studies at the University of Strathclyde, Glasgow, UK. She completed her biomedical engineering honours degree in 2017 before undertaking an engineering doctorate. Throughout her doctorate she researched the natural biomaterial silk, with a scope for potential wound care applications. She is currently working as a research assistant with a focus on bacterial detection using sensor-based methods. She has an interest in natural biomaterials for wound healing and health technology advancement.

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Sustainable seaweed derived antibacterial nanofibrous patches for chronic wounds

Sachin Latiyan[1], T S Sampath Kumar[1] and Mukesh Doble[1,2]

[1]Indian Institute of Technology Madras, India

[2]Saveetha Institute of Medical and Technical Sciences, India

Natural polymer derived nanofibrous wound dressings have gained much attention because of their biodegradability, high surface area, bioactivity and resemblance to the extracellular matrix. Agarose, a natural polymer from red seaweed, has been used in hydrogel form for angiogenesis, cartilage formation and wound healing applications. However, due to the difficulties in electrospinning agarose, only limited studies have been attempted on fabricating agarose-based non-woven wound dressings. Thus, the present study deals with the fabrication of agarose/polyvinyl alcohol based multifunctional nanofibrous patches. Additionally, zinc citrate was used as a potential antibacterial agent to overcome wound infections. The fabricated dressings exhibit ~400-550% swelling (in phosphate buffer saline) and enhanced mechanical strength (~9 MPa) intended suitable for most wound healing applications. The fabricated dressings maintained the structural integrity for the intended period (~3 days) of application and ~18% degradation was observed after two weeks due to their biodegradable nature. *In vitro* studies depicted an increased migration and proliferation of L929 mouse fibroblasts with agarose-based samples. The fabricated dressings displayed antibacterial activity against *Staphylococcus* aureus (Gram-positive) and *Escherichia coli* (Gram-negative) bacterial strains. Hence, multifunctional and natural product-based sustainable (in terms of cost and biodegradability) patches were successfully fabricated as a substitute for potential wound dressing material.

Recent Publications

1. Latiyan S, Kumar TSS, Doble M. Fabrication and evaluation of multifunctional agarose based electrospun scaffolds for cutaneous wound repairs. Journal of Tissue Engineering and Regenerative Medicine. 2022 Jul;16(7):653-664.

Biography

Sachin Latiyan is a doctoral candidate in the metallurgical and materials engineering department at the Indian Institute of Technology Madras, India. He pursued M.Tech in materials science and engineering in addition to M.Sc. in organic chemistry. Presently, he is pursuing a Ph.D. in biomaterials under the expert supervision of Prof. T.S. Sampath Kumar and Prof. Mukesh Doble.

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Scientific Abstracts | Day 2
December 06, 2022

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6th International Conference on

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December 06, 2022

Diabetic & Podiatry Wound Care | Wound Care Treatment & Therapies | Wound Dressings

Chair
D S Shinkevich
Moscow State University of Medicine and Dentistry
Russia

Session Introduction

Title: Stem cells and repair of necrosis after dermolipectomy: An interesting case
Ivan Hernández Patiño | Universidad Ricardo Palma | Peru

Title: Life-threatening complications of the DVT (clinical observation)
Orudzheva S A | A.V. Vishnevsky National Medical Research Center of Surgery | Russia

Title: The danger of DIY: Do-It-Yourself related full thickness burn injury; Case report during COVID-19 lockdown in Ireland
Aisling Bell | RCSI Hospital Group | Ireland

Title: Features of healing of postoperative wounds in oral cavity in patients with hemophilia
D S Shinkevich | A.I. Yevdokimov Moscow State University of Medicine and Dentistry | Russia

Title: A novel method for sternal fixation in cardiac surgery: Initial experience
Jitao Yang | Shandong Provincial PKUcare Luzhong Hospital | China

Title: Biodegradable and injectable poly (vinyl alcohol) microspheres in silk sericin-based hydrogel for the controlled-release of antimicrobials: Application to deep full-thickness burn wound healing
Bakadia Bianza Moise | Huazhong University of Science and Technology | China

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Stem cells and repair of necrosis after dermolipectomy: An interesting case

Ivan Hernández Patiño[1,2], Rossani G[1,2], Arriola A[1,2], Tello-Majluf D[3] and J De la Cruz V[1]

[1]Universidad Ricardo Palma, Peru

[2]Instituto Peruano de Ingeniería Celulary Manufactura Tisular, Peru

[3]SUNY Downstate Medical Center, USA

Fortunately, skin ulcers secondary to necrosis post dermolipectomy occur infrequently. Despite their rarity and because of their complex pathophysiologic nature their resolution is very challenging for a plastic surgeon.

This study is to recognize the security and efficiency of the utilization of CD34 stem cells (SC) that were obtained from the bone marrow within a solid autologous fibrin scaffold in a case of an ulcer with torpid evolution as a result of an abdominal dermolipectomy. This concept is to regenerate the affected tissue and to induce and promote the formation of granulation tissue that is compact enough to stimulate repair by secondary intent or in its own defect facilitating surgical closure.

We applied a technique under specific protocols to obtain the stem cells and used a healing technique in two ambulatory sessions through the application of CD34+ stem cells without any surgical intervention. There were no complications or concomitant infections and the recovery was completed within five weeks via secondary intention healing achieving a significant and satisfactory impact and response to the patient along with alleviating her physical and emotional struggle.

In this way we value the security and efficacy of this technique in the closure of wounds of soft, slow and unpredictable healing tissue. It is necessary to carry out investigation with a greater number of patients to incorporate this intervention in difficult cases.

Recent Publications

1. Hernández-Patiño, I., Rossani, G., Borobio, E., Talavera, E., Quiñones, MP, Rozas LL., R., Roque, JC, Jara, M., & De la Cruz-Vargas, JA (2021). Repairing effect of autologous serum in corneal lesions caused by chemical agents. Randomized double-blind preclinical trial in rabbits. Journal of Veterinary Research of Peru, 32 (6), e20425.

2. R. Niri et al., "Multi-View Data Augmentation to Improve Wound Segmentation on 3D Surface Model by Deep Learning," in IEEE Access, vol. 9, pp. 157628-157638, 2021.

Biography

Iván Hernández, Plastic surgeon recognized as scientist by CONCYTEC. He studied tissue engineering at the Wake Forest Institute of Regenerative Medicine in North Carolina in the USA. Associate Professor, undergraduate and postgraduate, at facultad de medicina. Universidad Ricardo Palma, Lima, Perú. Teacher and researcher at Instituto de investigaciones en ciencias biomédicas. Universidad Ricardo Palma, Lima, Perú. Responsible of the tissue engineering and cell therapy laboratory. Universidad Ricardo Palma, en Lima, Perú. Medical director of the Centro Camelias of plastic surgery and regenerative medicine for 20 years in Lima Peru. He has written more than 50 scientific articles related to the subject, as well as two books and chapters

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Life-threatening complications of the DVT (clinical observation)

Orudzheva S A, Mitish V A, Magomedova S D, Ushakov A A, Blatun L A and Paskhalova Yu S

A.V. Vishnevsky National Medical Research Center of Surgery, Russia

Deep-venous thrombosis (DVT) may be complicated by the pulmonary thromboembolism (PTE), post-thrombophlebitic syndrome, venous gangrene of the lower limb and pulmonary hypertension. The purpose of the article is to analyze the errors in the diagnostic and treatment of a patient with DVT, which is complicated with the development of PE and venous gangrene of the lower limbs.

A 63-year-old patient had come to the hospital in grave condition (shock, acute kidney injury (AKI) in complaining of big formation in the abdominal cavity, belly pain and pain and numbness in both lower limbs. After the stabilization of the patient's status, giant festering left ovarian fibroma was removed. In the post-surgery phase there were developed lower limbs edema and dry necrosis in distal feet. These complications were associated with prolonged use of vasopressors. Two months after the delimitation of necrosis zones, transmetatarsal foot amputation (by Chopart) was performed. After surgery- dyspnea, depression of consciousness, hemorrhagic rashes and AKI were developed. Ultrasound duplex vascular scanning demonstrated a floating clot of inferior vena cava. For further diagnostic and treatment, the patient was transferred to A.V. Vishnevsky Institute of Surgery, where we detected DVT of lower limbs, pelvic veins, right cor atrium, right cor ventricle with continuation of a clot into the pulmonary artery. Diagnosed with PTE, septic pneumonia foci, pulmonary hypertension.

A lower leg amputation was made according to purolo-necrotic wounds and infection progress. The patient refused thrombectomy surgery in an artificial blood circulation. Antithrombotic therapy continued on an outpatient basis. Death occurred 10 months later.

In conclusion: Ultrasound duplex vascular scanning was made only after three months as disease started. Compliance with clinical guidelines for the diagnosis, prevention and treatment of venous thromboembolic complications would ensure timely diagnostic and treatment of DVT and PTE, blue phlegmasia, prevent lower limbs lost and save the patient's life.

Recent Publications

1. Orudzheva S. A, Blatun L. A, Sokologorskiy S. V, Sheina M. A, Turova T. G and Paskhalova Yu. Prolonged regional analgesia in the complex treatment of extensive purulent-necrotic wounds on the background of decompensated arterial and venous insufficiency (case report). Wounds and wound infections. The Prof. B. M. Kostyuchenok Journal. 2019; 6 (3): 34–43.

2. Korneev A.V, Orudzheva S.A and Kudryavtsev A.N. Specific features of difficult airways in patients with face and neck burns. Messenger of Anesthesiology and Resuscitation, 2019, Vol. 16, no. 6, P. 67-73.

3. Korneev A.V, Orudzheva S.A, Kudryavtsev A.N and Ponomarev A.A. A new method of assessing airways and selecting the method of tracheal intubation in patients with burns of face and neck during planned surgery. Messenger of Anesthesiology and Resuscitation, 2020, Vol. 17, no. 6, P. 15-21.

Biography

Orudzheva S A. defended her doctoral dissertation at the age of 46 at A.V. Vishnevsky Institute of Surgery. Currently she is a senior researcher at the department of wounds and wound infections of the A.V. Vishnevsky Institute of Surgery. She has 44 publications with a total quoting score 127.

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The danger of DIY: Do-It-Yourself related full thickness burn injury; Case report during COVID-19 lockdown in Ireland

Aisling Bell, Natasha Christoduolides, Safwat Ibrahim and John Barry O'Sullivan
RCSI Hospital Group, Ireland

DIY injuries are a common cause of presentation to hospital around the world. During the COVID19 Pandemic there was a significant increase in the number of household injuries. Many of these injuries occur commonly in the home and they presented in increased proportions due to lockdown measures. However during lockdowns people also undertook activities they would normally outsource to skilled professionals which resulted in unique mechanisms of injury. We present the case of a young woman with a delayed presentation of a full thickness burn following the use of an at home laser hair removal device. We will discuss the recent literature on the effects of the pandemic on presentations to emergency services, the surgical management of this injury and its' reconstruction with biodegradable temporising matrix.

Recent Publications

1. Bell A, Christoduolides N, Ibrahim S and O'Sullivan JB. The danger of DIY Do-It-Yourself related full thickness burn injury: Case report during COVID-19 lockdown in Ireland. Burns Open. 2022 Oct;6(4):146-151.

2. A Bell, Z. Razzaq, H Mustafa, H P Redmond, Review of Operative and Non-Operative Time-Use During General Anaesthetic Cases in a Busy Surgical Oncology Service, British Journal of Surgery, Volume 109, Issue Supplement_1, March 2022, znac039.017.

3. A Bell, Z Razzaq, H Mustafa, H P Redmond, Mediastinal Ectopic Parathyroid Adenoma Causing Malignant Hypercalcaemia in a Young Female - a Case Report and Review of Literature, British Journal of Surgery, Volume 109, Issue Supplement_1, March 2022, znac039.014.

Biography

Aisling Bell is a Specialist trainee in plastic, reconstructive and aesthetic surgery in the Republic of Ireland. She is a graduate of the National University of Ireland, Galway and the Royal College of Surgeons in Ireland.

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Features of healing of postoperative wounds in oral cavity in patients with hemophilia

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Healing of postoperative wounds of oral cavity in haemophilia patients is accompanied by hemorrhagic complications, which negatively affects the quality of the epithelization.

Aim: To increase the effectiveness of management of oral postoperative wounds after dental surgeries in haemophilia patients, by applying optimal methods of treatments.

Materials and methods: We performed inpatient surgical treatments of 5 haemophilia patients complicated by various diseases of maxillofacial region. Average age: 51 y/o. 2 severe haemophilia patients' diagnose: chronic apical periodontitis and impacted tooth 3.8. Treatment: extraction. 1 severe haemophilia patient's diagnose: radicular cyst of mandible of teeth 3.2-3.4. Treatment: cystectomy. 1 moderate haemophilia patient's diagnose: chronic apical periodontitis of tooth 2.6. Treatment: apicoectomy of vestibular roots. 1 mild haemophilia patient's diagnose: chronic apical periodontitis of tooth 4.6. Treatment: anterior root resection.

All treatments were performed under a local anesthesia. All patients in the pre- and postoperative period underwent a general replacement hemostatic therapy: 4 patients - coagulation factor VIII and 1 patient - coagulation factor IX. Suture were applied for local hemostasis.

Results: No external bleeding was observed in postoperative period. Epithelialization occurred on average 15±4 days. In 3 (60%) patients, wounds healed by primary intention, in 1 (20%) patient after cystectomy, the healing took more than 14 days partially by secondary intention as a result of wound dehiscence. The wound was treated with iodine-gauze packing-strip that was trimmed, gradually pulling it out as the granulation tissue matured. Bleeding from the wound was not observed. In 1 (20%) patient, after extraction of tooth 3.8, the wound healed by secondary intention. The sutures were removed on the 7th day postoperatively and the wound dehiscence was observed. The wound was covered with mature granulation tissue and no further bleeding was observed.

Conclusion: The presence of mature granulation tissue in the postoperative wound of the oral cavity healing by secondary intention minimizes the risk of secondary bleeding in patients with hemophilia.

Recent Publications

1. D.S. Schinkevich and V. V. Afanasiev. The use of a silicone membrane after tooth extraction in hematological patients. 4th International Conference on Wound Care, Tissue Repair Regenerative Medicine March 08 & 10, 2021. Wound Care 2021_ Book. -2021. -P.64.

2. Shinkevich D.S. Features of local hemostasis in tooth extraction in patients with von Willebrand and Hageman diseases. D.S. Shinkevich, M.V. Magilevets. Russian Dentistry. – 2021. -№3. -C. 50-51.

3. Shinkevich D.S, D.S. Shinkevich and Yu.S. Ugurchiev. The use of dental implantation for preparation of the oral cavity for dental prosthetics in patients with blood coagulation disorders. Russian Dentistry. – 2021. -№3. -FROM. 52-53.

Biography

D S Shinkevich has completed his PhD at the age of 55 years from Federal State Budgetary Educational Institution of Higher Education "A.I. Yevdokimov Moscow State University of Medicine and Dentistry" of the Ministry of Healthcare of the Russion Federation, Russia. He is the professor of department of maxillofacial traumatology in "A.I. Yevdokimov Moscow State University of Medicine and Dentistry", Russia. Currently, working as professor of department of maxillofacial traumatology in "A.I. Yevdokimov Moscow State University of Medicine and Dentistry", Russia. He has over 28 publications that have been cited over 43 times and his publication H-index is 4.

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A novel method for sternal fixation in cardiac surgery: Initial experience

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Objectives: To investigate whether the Ni-Ti-shaped memory alloy embracing plate is an effective treatment for post -sternotomycomplications and to see if it can improve the mechanical stability of sternal closure and to evaluate its initial outcome.

Methods: One-hundred twenty patients from January 2012 through December 2015 underwent sternal fixation with the Ni-Ti-shaped memory alloy embracing plate in cardiac sugery. Sternal healing was evaluated by physical examination, wound healing complications and the computed tomography (CT) showings of coaptation the sternal halves. The pain scores were recorded preoperatively and postoperatively on day 3 to 7, discharge, 4 weeks and 3 and 6 months.

Results: The patients with Ni-Ti-shaped memory alloy embracingplate fixation had less postoprative comlications, such as fat liquefication, mediastinitis, sternal dehiscenc. The postoperative pain scores were significantly lower in patients with sternal fixation of embracing plates than that with wire cerclage. The life quanlity was imporoved in embracing plate fixation patients.

Conclusion: The Ni-Ti-shaped memory alloy embracing plate significantly improved the sternal stability closure and life quanlity and reduced postoperative pain in cardiac surgery.

Recent Publications

1. Yang J, Li Z, Lei H, Peng L, Qingtao F, et al. A Novel Method for Sternal Fixation in Cardiac Surgery: Initial Experience. J Angiol Vasc Surg 2022. 7: 096.

2. Jitao Yang, Xian'en Fa. Effect of Low Level Laser Irradiation Preconditioning On Infarct Size and Ventricular Remodeling in the Rat Heart. Adv Bioeng Biomed Sci Res 2022. 5(3): 195-199.

3. Jitao Yang, Zeshu Li, Lei Han, Peng Li, Qingtao Fu, Fei Nie, Lei Wang Preliminary experience with a 1470 nm diode ring laser with echosclerotherapy in lower limb varicose veins. Medical & Clinical Research 2022. 7(11):01-05.

Biography

Jitao Yang has completed his MM at the age of 27 years from Zhengzhou University, China. Now, he is studying for the degree of medical doctor. He is the lecturer of Weifang Medical College, China. Currently, working as a attending docor in thoracic and cardiovascular surgery in Shandong Provincial PKUcare Luzhong Hospital, PR China. He is skied at the microinvasive therepy of ischemic heart diseases and valular disease and hybrid therapy of aortic disease. He has voer 7 publicaitons.

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Biodegradable and injectable poly (vinyl alcohol) microspheres in silk sericin-based hydrogel for the controlled-release of antimicrobials: Application to deep full-thickness burn wound healing

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Deep full-thickness burn wounds are prone to multi-drug resistant (MDR) infections following injury, which extends the healing time. Thus, providing a bioactive hydrogel dressing with prolonged antimicrobial activity and reduced dressing changes is quite desirable for accelerating burn wound healing and preventing scarring. To achieve this, we developed an injectable hydrogel based on silk sericin (SS), poly (vinyl alcohol) (PVA) and PVA microspheres (MSs) containing vancomycin (VA), gentamicin (GEN), or their association (VG) for the healing of infected burn wounds. The microspheres were prepared by inverse emulsion crosslinking, while the hydrogels were prepared by freeze-thawing cycles. Antibacterial studies showed that gentamicin acts synergistically with vancomycin by increasing the bacterial killing rate and enhancing the biofilm inhibition and eradication effects on methicillin-resistant *Staphylococcus aureus* more than on *Pseudomonas aeruginosa* and *Escherichia coli*. Findings from SEM images showed that the microspheres were sphere-shaped with a smooth surface and their average diameter ranging from 26.22 to 32.42 µm suitable for parenteral drug delivery. The prepared hydrogel containing 10% of microspheres was more elastic than viscous, with lower than delta values (<1) suited for deeper injection with homogeneous tissue integration. The incorporation of VG-PVAMS in the PVA/SS hydrogel led to zero-order release kinetics and efficient antimicrobial effects. Moreover, the *in vivo* study using a rat full-thickness burn model showed that the VG-PVAMS@PVA/SS hydrogel displays a better therapeutic effect than drug-free PVAMS@PVA/SS hydrogel and TegadermTM film dressing by inducing early vascularization and collagen deposition, leading to early re-epithelialization and burn wound closure.

Recent Publications

1. Bakadia, B.M., Zhong, A., Li, X. et al. Biodegradable and injectable poly (vinyl alcohol) microspheres in silk sericin-based hydrogel for the controlled release of antimicrobials: application to deep full-thickness burn wound healing. Adv Compos Hybrid Mater 5, 2847–2872 (2022).

2. Bakadia, B.M. et al. (2022). Microbiome as Cancer Biomarkers. In: Shehzad, A. (eds) Cancer Biomarkers in Diagnosis and Therapeutics. Springer, Singapore.

Biography

Bianza Moise Bakadia is currently a Ph.D. student at Huazhong University of Science and Technology and a research fellow at the Higher Institute of Medical Techniques of Lubumbashi, DR. Congo. He received a Bachelor of Science degree from the Higher Institute of Medical Techniques of Lubumbashi, DR. Congo and a Master's degree from Huazhong University of Science and Technology, China. His research interests include biomedical analysis of biological fluids, the immune response to microorganisms and the development of biomaterials for tissue engineering. He has published more than 19 SCI papers.

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