

# Highlights on the First Annual Convention of the Philippine Wound Care Society "Revisiting Wound Care: Principles and Management in the Clinical Setting", Manila, February 9-10, 2012

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REPORT

## ABSTRACT

Last February 9-10<sup>th</sup>, the Philippine Wound Care Society, celebrated its first annual convention entitled "Revisiting Wound Care: Principles and Management in the Clinical Setting", at Manila, Philippines. Several experts from different specialties and countries discussed about basic pathophysiology of wounds, their diagnosis and assessment, compression therapies, role of different medical and surgical subspecialties including ancillary services, wound care by nurse and dieticians, chronic leg wound due to peripheral arterial disease, venous stasis ulcers, lymphedema, decubitus ulcers and, finally, diabetes foot ulcers (DFUs). In parallel to the Wound convention, a set of Workshop/Demo classes were held on the 2nd day by companies specializing in wound care products. On February 10<sup>th</sup>, the company Chemway Pharma, in coordination with the Center for Genetic Engineering and Biotechnology (CIGB) of Havana, Cuba, organized a Product Launch symposium, where two experts from Cuba and one from Philippines talked about Heberprot-P, a novel Cuban product to induce fast and high quality healing of DFUs. This symposium was entitled "Intralesional Human Recombinant Epidermal Growth Factor (Heberprot-P) for the treatment of advanced diabetic foot ulcers" and consisted on three lectures, two of them given by the Cuban specialists Dr. Manuel Raíces and Dr. Aristides I. García, who respectively brought details on the genesis of Heberprot-P and its healing results in DFU patients. The symposium was closed with the lecture of Dr. Rainan Gloria from Philippines, who showed the positive evolution of three Philippine DFU patients under Heberprot-P therapy.

**Keywords:** Diabetes, Conference, Wound care, diabetic foot ulcer, Heberprot-P

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## RESUMEN

**Apuntes de la Primera Convención Anual de la Sociedad Filipina para el Cuidado de las Heridas "El cuidado de heridas revisitado: Principios y manejo en el escenario clínico", celebrada en Manila, 9 y 10 de Febrero de 2012.** La Sociedad Filipina para el Cuidado de las Heridas celebró su primera convención anual titulada "El cuidado de heridas revisitado: principios y manejo en el escenario clínico", los días 9 y 10 de febrero en Manila, Filipinas. Varios expertos discutieron sobre la fisiopatología básica de las heridas, su diagnóstico y atención, las terapias por compresión, la función de las subespecialidades médicas y quirúrgicas, incluidos los servicios secundarios, el cuidado de las heridas por enfermeros y dietistas, las heridas crónicas en las extremidades derivadas de la enfermedad arterial periférica, las úlceras por estasis venosa, linfoedema, úlceras decúbito, y por último, las úlceras del pie diabético (UPD). En paralelo, durante el segundo día compañías especializadas en productos para el cuidado de las heridas impartieron talleres y clases demostrativos. En uno de ellos, la compañía Chemway Pharma, en coordinación con el Centro de Ingeniería Genética y Biotecnología (CIGB) de La Habana, Cuba, organizó un simposio para el lanzamiento de productos, en el que dos expertos cubanos, los doctores Manuel Raíces y Aristides I. García, junto con el Dr. Rainan Gloria, de Filipinas, presentaron, en tres momentos, el Heberprot-P, un novedoso producto cubano que induce una rápida y eficiente curación de las UPD. El simposio se denominó "Administración intralesional del factor de crecimiento epidérmico humano recombinante (Heberprot-P) para el tratamiento de úlceras del pie diabético avanzadas". Se abundó en la génesis de ese producto y sus resultados positivos. En la tercera de las charlas se mostraron los efectos satisfactorios en tres pacientes filipinos aquejados de UPD.

**Palabras clave:** Diabetes, congreso, cuidado de heridas, úlcera de pie diabético, Heberprot-P

## Introduction

Wounds, ulcers and chronic lesions, as consequence of metabolic disorders, are serious issues in almost all modern societies. When searching at the Internet about meetings dealing with wound healing, endocrinology and diabetes, a quick search offered the impressive amount of 70 international conferences targeting these three issues just in 2012 (Figure 1), and counting. Probably this census just evidences the huge challenge of inducing the healing of complex lesions such as those associated to peripheral arterial

disease, venous stasis ulcers, lymphedema, decubitus ulcers and diabetes foot ulcer among others.

It is well known that wound healing is an intricate process in which the skin (or another organ-tissue) repairs itself after injury [1]. In normal skin, the epidermis and dermis coexists in steady-state equilibrium, forming a protective barrier against the external environment. Once the protective barrier is broken, the physiologic process of wound healing is immediately set in motion. The classic model of wound healing

1. Nguyen DT, Orgill DP, Murphy GF. Chapter 4: The Pathophysiologic Basis for Wound Healing and Cutaneous Regeneration. In: Orgill D, Blanco C, editors. Biomaterials for Treating Skin Loss. Cambridge/Boca Raton: Woodhead Publishing (UK/Europe) & CRC Press (US); 2009. p. 25-57.

is divided into three or four sequential, yet overlapping, phases [2]: i) hemostasis, ii) inflammatory, iii) proliferative, and, iv) remodeling. However, as this process is not only complex but fragile, it is susceptible to interruption or failure leading to the formation of non-healing chronic wounds [3], a situation that is becoming global as human lifespan increases. Factors which may contribute to this situation include venous or arterial disease, elderly, infection and diabetes [4].

Diabetes mellitus (DM) is a disorder in which blood sugar (glucose) levels are abnormally high, because of the insufficient/absence of insulin body production to process glucose levels, which is known as hyperglycemia and the main hindrance for wound healing among diabetic patients. The worldwide incidence of DM is about 285 million of people in 2011, with estimates of reaching 466 million by the year 2030. Among the DM-associated illnesses, Diabetic Foot Ulcers (DFU) represents a significant source of morbidity and mortality, increasingly becoming a health problem for almost all societies [5].

The therapeutic management of diabetic patients carrying DFUs is currently based on: metabolic control, debridement, moist cures, wound dressing, local pressure off-loading, antimicrobial treatment of infections, and revascularization procedures, when indicated. However, even in such a case and regardless of a highly trained medical team, it is really hard to turn ulcer evolution toward healing. A great number of diabetic patients do not respond to treatments, mainly if complications exist (infections, the lack of arterial irrigation characteristic of the diabetic, and other health conditions) resulting in a high statistic of DFU amputations [6].

I had the opportunity to attend and lecture about DFU treatment with Heberprot-P at the First annual convention organized by the Philippine Wound Care Society, entitled "Revisiting Wound Care: Principles and Management in the Clinical Setting". As a result, this report is aimed at reviewing the most relevant information shared by all the participants, from our point of view, and also the companies at the Convention Fair. The Cuban participation in this important meeting was intended to distribute relevant data about the Integral care of DFU patients with Heberprot-P, a goal accomplished thank to the sponsorship of Chemway in partnership with Heber Biotec and the Center for Genetic Engineering and Biotechnology (CIGB) of Havana, Cuba.

### The Philippine Wound Care Society

The Philippine Wound Care Society was founded on September 9th, 2009 [7]. This society gather together physicians from different specialty teams and allied services (wound care nursing, physical therapy, nutritionist and others) with the goal of bringing together professionals involved in wound care. The membership is mainly formed by doctors from various subspecialties, such as: general surgery, thoracic and cardiovascular surgery/vascular surgery, plastic surgery, dermatology, internal medicine, endocrinology and rehabilitation medicine, and allied specialty members (including nursing and physical therapy).

The society celebrated its First Annual convention entitled "Revisiting Wound Care: Principles and

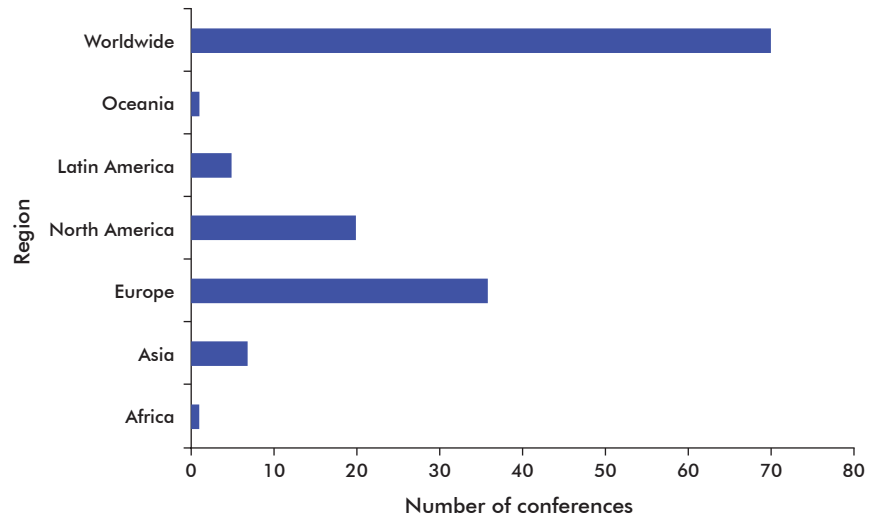


Figure 1. Regional distribution of 70 major international conferences on Wound, Diabetes and Endocrinology, to be held in 2012 throughout the world. Data compiled on February 6th, 2012.

Management in the Clinical Setting" on February 9-10th, 2012, at the Century Park Hotel, Manila, Philippines [8]. In parallel with the convention, several Workshops were held on the 2nd day of the meeting, organized by companies specialized in Wound Care products.

### The Conference

The organizers succeeded in getting the participation of several regional leaders to the Philippine's meeting, among them: Dr. Sadanori Akira, from Japan, President of the Wound Union of Healing Societies; Dr. Gerit D. Mulder, Director of the Wound Treatment and Research Center from United States of America; Prof. Coling Song, Founder of the Asian Wound Healing Association Plastic, Reconstructive & Aesthetic Surgery of Singapore; and Prof. Joon Pio Hong, Plastic Surgery, Member of the ASAN Cancer and Diabetes Center of South Korea. All of them are outstanding personalities in the field of wound care. Personally, I was impressed with the spirit and motivation of the Philippines speakers as well as with the passion of Sr. Sivagame D/O Maniya, from Singapore, who is an internationally awarded nurse in specialized Advanced Wound Care.

The opening speech of the Philippines Annual Convention was given by the President of the Philippine Wound Care Society, Dr. Martin Anthony Villa. Followed a message from Dr. Sadonori Akita, President of the World Union of Wound Healing Societies (WU-WHS), who remarked the importance of the national societies and the role of multidisciplinary specialists in wound care, sharing some valuable data since 1990 until now about the evolution of gross sales in Japan of medicines for bed sores and skin ulcer treatment, showing how new biological treatments at the beginning of the 21st century had succeeded as novel and very efficient therapies together with the family of previously registered products (mainly of chemical nature). Dr. Akita dedicated part of his lecture to promote the next celebration of the 4th Congress of the World Union of Wound Healing Societies to be held

2. Stadelmann WK, Digenis AG, Tobin GR. Physiology and healing dynamics of chronic cutaneous wounds. *Am J Surg.* 1998;176(2A Suppl):26S-38S.

3. Garg HG, Longaker MT, editors. *Scarless Wound Healing*. New York: Marcel Dekker, Inc; 2000.

4. Enoch S, Price P. Cellular, molecular and biochemical differences in the pathophysiology of healing between acute wounds, chronic wounds and wounds in the aged [Internet]. *Bridgend: World Wide Wounds; 2004* [cited 2012 Mar 12]. Available from: [www.worldwidewounds.com/2004/august/Enoch/Pathophysiology-Of-Healing.html](http://www.worldwidewounds.com/2004/august/Enoch/Pathophysiology-Of-Healing.html)

5. International Diabetes Federation. *IDF Diabetes Atlas*. 5th edition. Brussels(Belgium): International Diabetes Federation; 2011.

6. Most RS, Sinnock P. The epidemiology of lower extremity amputations in diabetic individuals. *Diabetic Care.* 1983; 6:87-91.

7. The Philippine Wound Care Society "Revisiting Wound Care: Principles and Management in the Clinical Setting" [Internet]. Manila: The Society. 2009 [cited 2012 Mar 12]. Available from: [www.philippinewoundcaresociety.org](http://www.philippinewoundcaresociety.org)

8. 1st Annual Convention of the PWCS "Revisiting Wound Care: Principles and Management in the Clinical Setting" [Internet]. Manila: The Philippine Wound Care Society. 2012 [cited 2012 Mar 12]. Available from: <http://www.philippinewoundcaresociety.org/p/annual-convention.html>

in Yokohama, Japan, next September 2nd-6th, 2012 [9]. The next speaker was Dr. Colin Song, who gave another message on behalf of the Asian Wound Healing Association (ASWA), remarking the challenges of facing wound healing in Asia. Summarizing this part of the meeting, these three speakers emphasized in the need of sticking together professionals involved in wound care, in order to offer the best possible attention to patients' wounds as well as to set up the conditions for offering better care in the future.

Once finalized this part of the opening ceremony, the Convention started covering the following topics: 1) General Principles of Wound Care, 2) Peripheral Arterial Occlusive Disease. 3) Venous stasis ulcers & lymphedema and 4) Diabetic Foot (program available at [8]).

Many speakers shared their procedures to treat wounds covering the basic elements of healing, the same as described in the 'world state of the art in wound healing'. Other emphasized in the need to extend the amount, quality and participation of medical and scientific exchanges regarding professional seminars, public forums, public education programs, online media use as Facebook, blogs, tweeter, smartphones, etc., to aware the medical staff and wound patients on the latest healing procedures. These efforts include boosting the role of Professional Society Web Portals to enable cooperation among all countries.

During the convention, several speakers talked about their own experiences in treating different types of wounds (chronic, pressure, neuropathic, traumatic, surgical, neoplastic, arterial, venous, vasculitis, wounds), mentioning those elements that failed in contributing to the complex mechanism of healing and proposing actions, according their own view, to minimize this situation. Among the most mentioned elements were: the selection of appropriate moist dressing, the control of exudates and the orthopedic measurement to avoid recurrence.

In a second lecture, Dr. Akira offered details about a clinical trial under preparation on the use of autologous adipose-derived stem cells in chronic radiation injuries. This therapy is being applied in ongoing clinical trials targeting myocardial infarction, breast reconstruction, spinal injury, wound healing (fistula), liver cirrhosis, urinary incontinence, burger's disease, burns and other entities, in a multinational program.

Dr. Jeffrey Niezgoda, from USA, spoke about the role of hyperbaric chambers in the control of infection in complex DFUs and how this therapy stimulates healing. It was interesting to see a lecture about the first therapy addressed to stimulate wound healing based in an intellectually protected food supplement registered with the commercial name of Abound. Dr. Jesus Fernando Inciong, the presenting author, gave details about the role of particular amino acids as Arginine, Glutamine and Leucine in promoting cell division by regulating protein synthesis, stimulating wound healing in consequence. Among the main candidates to receive this therapy are patients carrying 'acute and hard to heal' wounds including pressure and venous leg ulcers, diabetic foot ulcers, burn injuries and non-healing surgical wounds.

Several speakers described in their lectures their abilities as surgeons to establish open bypass surgery in compromised limbs, the use of surgical procedures in early wound stabilization and closure, infection control, protection of essential structures as bond, joint, tendon, ligands and vessels addressed to preserve leg function, limb length as aesthetics.

Dr. Joon Pio Hong talked about limb salvage procedures mentioning micro-vascularization techniques, topic application of epidermal growth factor to promote wound healing, and the use of human adipose-derived stem cells (ADIPOPLUS) to promote healing in ischemic diabetic ulcers and in Crohn's Fistula, this last with the peculiarity that ADIPOPLUS was injected directly into the wound bed.

The use of traditional medicinal methods for wound care was described by Dr. Jaime Z Galvez Tan, from Philippines, who discussed about the positive role of acupuncture, herbal medicine (guava, aloe, turmeric, Gotu kola, and honey) topically applied on different type of wounds.

During the session addressing DFUs, practically all the speakers described the complexity of this type of pathology and the classical procedures to treat DFUs, covering: infection control, debridement, dressing, microsurgery, skin-graft application and orthopedic measurement.

Lectures on the use of Heberprot-P were imparted the last day of the meeting, to recall the attention of the audience and key regional leaders about the efficiency and positive impact of this therapy in promoting efficient and fast wound healing. Dr. Manuel Raíces and Dr. Aristides Garcia from Cuba and Dr. Rainan Gloria from Philippines, talked about the novelty and impact of locating a human recombinant growth factor directly into the wound bed of DFU-bearing patients. This was a promising informative action, considering the product is neither launched nor even registered in Philippines, to aware the leaders of opinion from that country about DFU management just few weeks prior to the Heberprot-P official registration. In this regard, the lectures had successful impact on the audience, since basic information was given to participants and we were able to make evident the clinical benefits of Heberprot-P compared to conventional and in-use novel therapies. Participants from other countries were also update on the use of Heberprot-P, its general background of use and possible territorial expansion, probably years before the product will be available in their respective countries.

In summary, the Conference gained the attention on wound care, and brought together specialists and clinicians from several countries interested in solving such a diverse medical entity worldwide. Some of the novelties for treating them would be available in the near future, and others, like Heberprot-P, can be opening new oportunities for traditionally unmet medical needs as UPDs.

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9. 4<sup>th</sup> Congress of the World Union of Wound Healing Societies, WUWHS 2012 [Internet]. Tokio: The Union. c2012 [updated 2012 Mar 21; cited 2012 Mar 26]. Available from: <http://wuwhs2012.com>