Book Review

Principles and Practice of Wound Care

Sujata Sarabahi, V. K. Tiwari

Edition 2011

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When we go through this multi-authored book, the first two things that strike at once are its comprehensiveness and its well-designed layout, and the editors of this book need to be complimented for their effort. 'Wound Care' is a vast subject when one intends to discuss both principles and practices, and the editors have very aptly chosen the topics and then designated them to appropriate authors. Not only have they succeeded in covering all types of wounds but all factors influencing wound care like nutrition, oxygenation, negative pressure, etc. have also been deliberated in great detail. This book is also special because all the contributing authors have kept the science petty simple so that this book can be of use to general surgeons, orthopaedic surgeons, plastic surgeons, students, research workers, technicians and nurses.

This book is broadly divided into four sections: History and Healing, General Principles of Wound Management, Types of Wound and their management and Miscellaneous.

In the section on 'History and Healing', there are five chapters. 'Evolution of Wound Care' by Dr. Savita Arora is about wound management through the ages starting from the days of Sushruta well before the birth of Christ, through the Middle Ages and the Renaissance period, the period between sixteenth and nineteenth century, the

period thereafter, right up to the recent times with all its advances! Dr. Harsh Mohan's chapter on 'Pathology of Wound Healing' discusses about the phases of wound healing, types of healing, factors influencing wound healing, complications of healing and briefly touches on certain recent advances like oxidized regenerated cellulose and biodegradable scaffolds.

The chapter on 'Recent Advances in Wound Healing', authored by Dr. Mary Babu, is about management of fibrotic wounds and chronic ulcers and how recent advances have helped them. She proposes an ideal dressing which will do wound cleansing, remove exudates, provide a moist environment, prevent trauma, and be easily available and economical. The chapter also refers to skin substitutes, tissue engineering and stem cells.

The editor, Sujata Sarabahi's chapter on 'Scars following Wound Healing' has a classification of scars, describes differences between hypertrophic scars and keloids, talks about the various scales of scar assessment and scar management by surgical and non-surgical means like pressure therapy, silicone gel/sheet, massage, splintage, steroids, inhibitors of gene transfer, flavonoids, lasers, radiations, cryotherapy, intralesional antimetabolites, skin fillers and tattooing. The chapter on 'Classification of Wounds', penned by Dr. R.S. Mohil, discusses about the classification on the basis of the amount of contamination in the wound and whether these wounds are contusions, lacerations, bruises, puncture wounds, bites, traction/avulsion injuries, crush injuries or ulcers. The chapter also discusses about healing by primary, delayed primary and secondary intentions and by epithelialization.

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The section on 'General Principles in Wound Management' has six chapters. Dr. R.K. Chittoria has beautifully illustrated the principles of 'Wound bed preparation', which gives a structured and systematic approach to the management of a non-healing wound, discusses the TIME principles, and ends in a very informative flow chart.

'Initial Management of Life Threatening Wounds' by Dr. Sushma Sagar is about life-saving management in faciomaxillary wounds, crush wounds of limbs and open chest and abdominal wounds with immediate risk of underlying organ damage, exsanguinations and death and delayed risks of sepsis and prolong morbidity.

Dr. S. Raja Sabapathy's chapter on 'Debridement – Preparing the Wound Bed for Cover' is about the evolution of the concept of radical debridement from the previously practiced serial debridement. This chapter deals at length about the technique of radical debridement under tourniquet, ample wound irrigation and perfect haemostasis. The chapter also deals with other non-surgical modalities of debridement: Hydro-surgical, biological (maggots), enzymatic and the role of antibiotics, skin soaps and tetanus prophylaxis.

Dr. Mohit Sharma's chapter on 'Dressings and Topical Agents in Wound Care' discusses about the rationale behind wound dressings, aims of these dressings and characteristics of an ideal dressing. Dressings have three layers: Contact layer, absorbing layer and binding layer and they can be non-resorbable, occlusive, hydrophilic/absorptive, and hydrogel. Topical agents – antimicrobials, growth promoting agents, matrix forming agents and topical debriding agents also find a mention in this chapter.

The co-editor, Dr. V.K. Tiwari's chapter on 'Surgical Closure of Wounds' deals with the technique of wound closure, classification of sutures and needles, and newer closure techniques such as adhesives, skin staples and adhesive tapes. The chapter also describes in detail all aspects of skin grafting. Dr. V.K. Malik's chapter on 'Surgical Site Infection: Prevention Strategies' is about epidemiology of such infections, how to reduce them by measures before surgery and during surgery in the OR. The author also evaluates the characteristics of various antiseptic skin preparations in terms of anti-microbial coverage, onset and duration of action and their clinical application. Dr. Malini Kapoor in her chapter on fungal wound infection talks about epidemiology, clinical

features, diagnosis and management of these infections.

The third section on 'Types of Wound and Their Management' is the largest and has 21 chapters. Each chapter describes wounds in unique locations and of unique aetiology. Thus in this section we find chapters on crush injury of limbs, skin avulsion injuries, diabetic foot infections, vascular ulcers, venous ulcers, management of burn wounds, radiation wounds, pressure sores, trophic ulcers on feet, necrotizing fasciitis, bite wounds, malignant wounds, gun-shot wounds, upper and lower limb wounds and foot defects. Giving due importance to the commonly observed diabetic wounds four chapters, authored by four different authors, on various aspects of this infective pathology are given in this section.

Dr. Harish Chellani's chapter on 'Issues in Neonatal Wound Management' discusses about epithelial stripping, neonatal burns, thermal injuries, pressure/ischaemic injuries, extravasation injuries, excoriations, wounds due to birth trauma and neonatal conditions like epidermolysis bullosa and meningomyelocele. The chapter also recommends guidelines to prevent neonatal trauma and offers best practices and dressing changes.

Section 4 is a collection of four chapters on miscellaneous subjects. Dr. Morris Topaz in his chapter on 'Role of Regulated Negative Pressure Therapy in Wound Healing' describes the indications and physical basis of RNPT and goes on to illustrate the clinical application of RNPT and regulate oxygenation+RNPT in necrotizing fasciitis, diabetic foot, for fixation of split skin graft, pressure sores, venous ulcers, and compound fractures.

Dr. Karoon Agarwal's input on 'Role of Nutrition on Wound Healing' defines normal nutritional requirements, nutritional assessment and the role of each component of nutrition in wound healing. Dr. Ram Shanmugam's chapter on 'Role of Physiotherapy in Wound Healing' discusses the role of exercise therapy, electrical stimulation, ultrasonic therapy, ultraviolet therapy, laser therapy and hydrotherapy in healing wounds. Dr. Ashish Rai's segment on 'Hyperbaric Oxygen Therapy in Management of Wounds' gives us an overview of the history of use of this modality, mechanism of oxygen transport in HBO therapy, the role of oxygen in wound healing and the therapeutic protocol with complications of using this modality.

The book is privileged to have a very crisp foreword

penned by Dr. S.P. Bajaj, a very innovative thinker of our time and a burn surgeon par excellence. It was released in February this year during the Annual Conference of the National Academy of Burns India in New Delhi. The 468 page book is hard bound, single volume and has been published by Jaypee Brothers Medical Publishers (P) Ltd. New Delhi. I am of the opinion that this book must find a place in every library, frequented by students and

surgeons of all hue and colour, nurses, and technicians. It is an ideal reference book for all who deal with intractable wounds in their practice. Now does that leave behind many in this profession?

Surajit Bhattacharya

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Forthcoming Events

August 10 – 12, 2012

HAIRCON 2012 – 4th. Annual Conference of Association of Hair Restoration Surgeons AHRS

Venue: Hotel Golden Park, 13 Ho Chi Min Sarani, Kolkata, India.

Contact: Dr. Manoj Khanna,

Tel: 91 33 22829126/22828500

Email: haircon2012@gmail.com

www.ahrsindia.com

August 24 – 26, 2012

COSMO LASERCON 2012 – Live Workshop on Cosmetic laser Surgery

Venue: Hotel Fariyas, Lonavala, Maharashtra, India.

Contact: Dr. Ajay Hirani, Vasudhan Cosmetic Centre, Mumbai.

Tel: 9820288508

Email: info@iacls.com

www.iacls.com

September 12 - 15, 2012

LASERINNSBRUCK 2012 – Advances and Controversies in Laser and Aesthetic Surgery

Venue: Faculty of Catholic Theology, University of Innsbruck, Innsbruck.

Contact: Mr. George Koliopoulos

Tel: +30 211 100 1781

Fax: +30 210 66 42 116

E-mail: g.ko@zita-congress.gr

September 28 - 30, 2012

ISSHCON 2012 – 36th. Annual Conference of Indian Society for Surgery of the Hand

Venue: Amritsar, Punjab.

Contact: Dr. Ravi Mahajan, Org. Chairman, Amandeep Hospital, Model Town, G.T. Road, Amritsar.

Tel: +9988106272 / 0183 5051896

Fax: 0183 2223188

E-mail: drravimahajan@rediffmail.com

October 4 and 5, 2012

22nd. ETRS Meeting – European Tissue Repair Society

Venue: Royal Olympic Hotel, Athens, Greece..

Contact: Mr. Nikos Antonopoulos

Tel: + 30 211 100 1782

Fax: + 30 2106642116

E-mail: n.an@zita-congress.gr

www.etr2012.org

November 2 and 3, 2012

APSI Accredited Course on Cleft Lip and Palate

Venue: Post Graduate Department of plastic Surgery, King George's Medical University, Lucknow, India

Contact: Prof. A.K. Singh / Dr. Brijesh Mishra

Tel: 09415006600 / 9415060080 / 91 522 2257446

Email: apsicon2012@gmail.com; singhkarun@hotmail.com

November 4-8, 2012

APSICON 2012 – 47th. Annual Conference of Association of Plastic Surgeons of India

Venue: Convention Centre, King George's Medical University, Lucknow, India

Contact: Dr. Vijay Kumar / Dr. Adarsh Kumar

Tel: 09415085625 / 09415017220 / 91 522 2257446

Email: apsicon2012@gmail.com; singhkarun@hotmail.com

www.apsicon2012.com

November - 18, 2012

1st. Lebanese Hand & Reconstructive Surgery Conference

Venue: Le Bristol Hotel, Beirut, Lebanon

Contact: Joseph Bakhach

Email: lsrm.ispras@trust-traders.com

www.ispras.com

November 30 – December 2, 2012

WOUND CARE CON 2012 - 6th. Annual Conference of Society of Wound Care & Research

Venue: Rohilkhand Medical College & Hospital, Bareilly, India

Contact: Dr. Devendra Gupta, 54 Prabhat Nagar Bareilly 243001

Tel: 09359103564

Email: dr.dkgupta@yahoo.com

November 30 – December 2, 2012

15th. INTERNATIONAL COURSE ON PERFORATOR FLAPS

Venue: Alumni Hall, NYU Langone Medical Centre, Farkas Auditorium, 550 First Avenue, New York, NY 10016, U.S.A.

Contact: NYU Post-Graduate Medical School, 545 First Avenue, New York, NY 10016

Tel: 212.263.5295

Fax: 212.263.5293

E-mail: cme@nyumc.org

cme.med.nyu.edu

February 24 – March 1, 2013

17th. WORLD CONGRESS OF IPRAS

Venue: Espacio Riesco, Santiago, CHILE

Contact: Mrs. Maria Petsa

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