

# BURN WOUND DRESSING

---

**DR. RAJAN BHIVAPURKAR M.Ch. FICS,  
DR. ANAND DONGRE M.D.**

**KEY WORDS :**  
Time saver, Neat

## **ABSTRACT :**

An alternative technique of wound dressing as compared to conventionally used dressing technique is described.

## **INTRODUCTION**

Whenever possible, thermal burn wounds are treated by occlusive method. This largely depends upon work load/manpower ratio of any burns unit; Dressings are changed on alternate days and takes in a patient of 30% TBS burns up to 3 hours. This is then repeated 15 times or so during patient's hospital stay.

Paraffin gauge, cotton gauge gamgee pads, rollar bandages and ointment tubes for surface application on burn wounds are the normally used materials. It is observed that application of ointment manually to affected parts is time consuming and. Within few hours dressings looks wet in patches & gives out bad odour. And on the following day dressings look in disarray.

## MATERIAL AND METHODS

A total of 11 patients of 30% to 40% burns were treated by conventional & alternative technique of dressing as shown below :

### Conventional technique : Materials used (5) patients

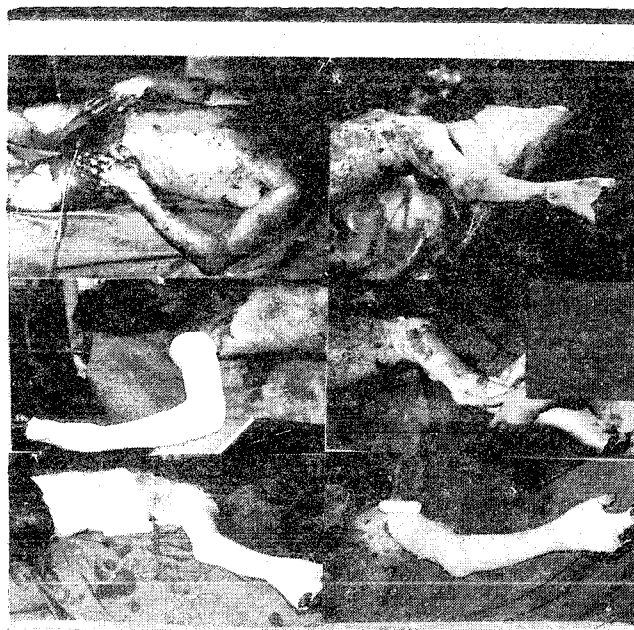
- \* Paraffin impregnated gauze  
Ten cms size squares.
- \* Cotton-gauze (Gamgee) Pads.
- \* Cotton Rollar Bandages.
- \* Ointment/Cream/Tubes/Jars

### Alternative Technique : Materials used (6 Patients)

- \* Cotton tubular stokinnet of various diameters.
- \* SofRoll Cast Padding.
- \* Manually operated Insecticide spray gun with solution of Povidon Iodine in water base.
- \* Autoclaved mosquito net cloth impregnated with petroleum Jelly and Paraffin in half meter lengths and ten cms width.

## DISCUSSION

Improvement in normally carried out practise was felt desirable. The reason being to improve aesthetics & to reduce time taken for eachh dressing. Application of ointment has had to be done differently & a method had to be found to make it painless & quick. It was felt dressings should look neat & tidy between the dressings changes and for



this to be achieved different materials needed to be searched & tried. For reducing heat loss, particularly in winters from burn surfaces, a substitute for rollar bandages was also needed. Material that keeps looking neat, encourages patients mobility & handling of body parts while nursing & is less time consuming to apply was to be found! A market search with this aim has resulted in identifying the same. The advantages of using alternative material & disadvantages of using conventionally used materials is summarised.

## ADVANTAGES

- i) Substantial reduction in time
- ii) Looks neat & tidy between dressing changes
- iii) Heat loss is less through soft material
- iv) Spraying of povidon iodine is easy
- v) Joints move freely and Nursing is easier

VI) Compression prevents hypertrophy and graft settles well

metabolic changes with ease of its application and which is cost effective is described.

#### DISADVANTAGES

1. Manual ointment application at times-painful
2. Within hours dressing is in disarray & wet
3. Dressing restricts mobility of joints
4. When soaked dressing gives out strong odour
5. Bed nursing and handling of body parts during changing of sheets, is difficult

Time taken for dressings by new materials is substantially reduced and so is anaesthesia time. Against the conventionally used anaesthetic technique of endotracheal intubation & intermittent positive pressure ventilation with muscle relaxant in new technique intramuscular ketamine, atropine diazepam and ketarolac were used along with spontaneous mask ventilation of oxygen. It admirably eliminated the haemodynamic stress response and metabolic alterations seen in endotracheal intubation and general anaesthesia.

Subsequently, analgesia requirement in between dressings changes was less, nursing was easy with better mobility of patients and body parts.

#### CONCLUSION :

A preferred alternative method of dressing which results in improved aesthetics causes least interference in terms of haemodynamic and

#### REFERENCES

- 1) BOSWICK, J.A. **The role of dressings in treating burn wounds** in J.A. Bowsick (Ed). *The Art of Science of Burn Care* : Maryland : An Aspen Publication, 1987 PS3.
- 2) Hurt, A : Eriksson, E. **Management of burn wound** *clin Plast Surg*. 13 : 57 : 1986.
- 3) Mac Millan, B.G. **Closing the burn wound**. *Surg Clin North Am* 58: 1205, 1978.
- 4) PRUITT, B.A. : CURRERI, P.W., **The burn wound and its care** , *ARCH. SURG.* 103 : 461, 1971.
- 5) YANG, C.C; Xiao, Y.R.; LL, Y.Y. **Management of the burn wound** in C.C. YANG. W.S. HSU; T.S., Shis (Eds), *Treatment of burns*, Newyork: Shanghai Scientific & technical Publishers 1982. P41-105.

#### AUTHOR NAMES AND ADDRESS

<b>Dr. Rajan Bhiwapurkar,</b>	<b>Superintendent</b>
Dr. Anand Dongre,	Consultant Anaesthesiologist, Advance Scanning Centre, & Smruti Trust Hospital.

**Smruti Trust Hospital and Research Centre,  
Nehru Marg, Nagpur-12**

# EUROSILICONE

INDO - FRENCH COLLABORATION  
HUMAN BODY IMPLANTS • ADVANCE COMPUTERS • PRESSURE GARMENTS

Vishal Mandir, Ground flr., 6th Road, Khar (West), Bombay-400 052. INDIA  
Tel.: (022) 544543, (022) 6263739, (022) 541353, Fax : 22-6271843

Dear Doctor

Best Wishes from EUROSILICONE.

You must be aware of the media created recent controversy of the Gel filled Silicone Breast Implants. The fear of rupture and its systematic absorption could be counted as a responsible factor for future development of Carcinoma?

Which has discouraged many of the surgeons and patients. THE RECENT BREAK THROUGH in the technology is the INFLATABLE BREAST IMPLANTS. The outer envelopes or the jacket is made up of sole from silicone and no gel or no liquid silicone does exist in the implant. It can be filled by distilled water or normal saline.

These are the following benefits with the new kind of implants:-

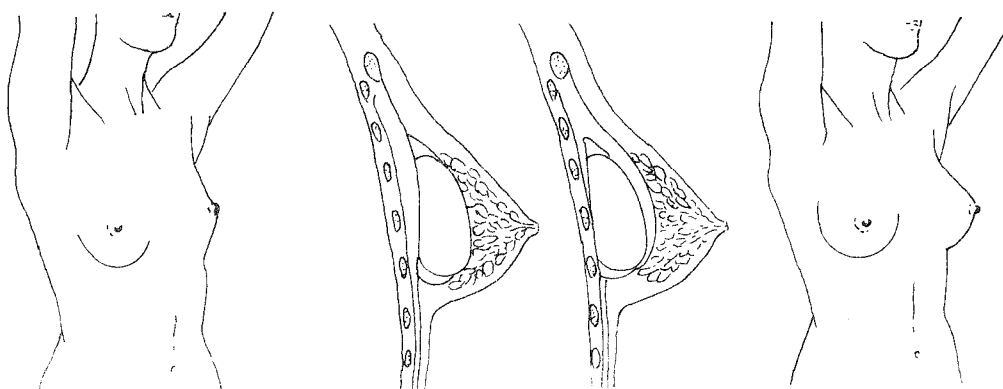
- 1) Freedom of getting the appropriate size of the breast by filling the required amount of the saline according to the need on the operating table.
- 2) No risk of any untoward happenings, even in the case of accidental rupture as normal saline gets absorbed while the jacket or the outer layer of silicone implants remains intact and can be withdrawn.
- 3) Easy to handle, sterilize, operate and it requires very small incision, hence minimum cutting & maximum tissues respect.

The availability of INFLATABLE BREAST IMPLANTS gives freedom and liberty to the surgeons and simplifies the procedure.

The EUROSILICONE is an Indo-French collaboration for marketing and manufacturing the INFLATABLE BREAST IMPLANTS.

The introductory offer "INFLATABLE BREAST IMPLANTS" will be at an astonishing low price of Rs. 12,600/- for one pair (2 pieces) including all the taxes (This offer is limited to APSI members in India & South Asian Countries subject to revise).

EUROSILICONE is committed to fulfil the promise of the best quality IDEAL BREAST IMPLANTS for your satisfaction.



**With Best Compliments from :**

**Hindustan Antibiotics Ltd,**

**(Govt. of India Enterprises) Pimpri, Pune-18.**

**HALTAX (Cefotaxim Sodium) 250 mg/1 gm**

**PRILEX (Cefazolin Sodium) 500 mg/1 gm**

**PRIMIACIN (Amikacin) 100 mg/500 mg,**

**2 ml.**

**AND**

**original Research product**

**Antifungal HAMYCIN Suspension**

**For**

**Surer success against candida Albicans infections.**

**BOOK REVIEW****A PRACTICAL APPROACH TO  
RECONSTRUCTIVE SURGERY****ASHOK GOVILA**

The textbook presents the best in the experience of both western and eastern authors. It lays emphasis on successful transfer of grafts and flaps.

Besides describing in great detail and simplified manner the basic techniques and successful transfer of grafts and flaps the textbook covers the latest methods of reconstruction such as fasciocutaneous flaps, myocutaneous flaps, free microvascular tissue transfer and extra corporeal tissue transfer. Each method has its anatomy elaborated in detail for the ease of execution by the surgeon followed by planning, topography of the flap including design variations and operative technique.

Microvascular surgery comprises the largest chapter in the book. It includes basic microsurgical techniques, micro instruments, magnification systems, microneural surgery and free tissue transfer. The chapter on the tissue transfer includes only the most used and useful composite flaps, including vascularized fibula, iliac crest and toe thumb transfer.

All those flaps that have the potential of extracorporeal transfer have been described simultaneously, giving greater details of method of its transfer.

In the Foreward of the Book, Prof. D.A. McGrouther, Head of Dept. of Surgery, University College London Medical School has highly commended the book for excellence of surgical techniques and philosophical approach.

**ABOUT THE AUTHOR** - The book has been a labour of love for Dr. Ashok Govila, Additional Professor, Dept. of Plastic Surgery, GGI, Chandigarh. He is a noted plastic surgeon who brings to bear his decades of teaching and practical experience to make the book most comprehensive, practical and simple to follow. All line drawings have been done by Dr. Govila himself. Dr. Govila is currently Senior Consultant, Dept. of Plastic & Reconstructive Surgery, Mafraq Hospital, Abu Dhabi currently Senior Consultant, Dept. of Plastic & Reconstructive Surgery, Mafraq Hospital, Abu Dhabi (U.A.E.)

ISBN 81-85017-66-2 1993 (H.B.) 100 Line Drawings Rs. 200

**INTERPRINT, MEDICAL PUBLICATIONS DIV.**

**MEHTA HOUSE, A-16, NARAINA II,**

**NEW DELHI-110 028.**

**YEAR BOOK OF PLASTIC, RECONSTRUCTIVE  
AND AESTHETIC SURGERY 1991**

**EDITOR : STEPHEN H. MILLER M.D. MOSYBY YEARBOOK Inc 200 NORTH LA SEELE st. CHICAGO. IL 60601 PAGES 325. ISSN. NO. 1040- 175X BOOK NO. 0-8151-6088-0**

Articles from 63 international Journals have been abstracted by the Editor and five associate Editors :- namely **Kelman Cohen Richmond M.D. Peter McKinney Chicago Illinois, M.D.C.M. F.A.C.S., Martin C. Robson, Texas, M.D., Robert L. Ruberg, Ohio M.D. Linton A. Whitakar, Philadelphia, M.D.**

For the first time point counterpoint entries have been expanded to encourage the authors of abstracted articles to respond to comments or to questions raised by the editors. This dialogue has increased the amount of information to the readers substantially. Under seven main heads, literature up to June 90 has been reviewed and by the for the largest contribution has been made by aesthetic surgery section for which 64 pages have been used.

For a library this issue as well as the once that would follow in years to come would remain the most valued and used book by the dept. in any institution for wealth of information it supplies of current trends in research and level of innovative practices.

**BASIC PRINCIPLES OF SURGERY REVISITED :****RAG BAG OF RANDOM PROCEDURES**

**BY : DR. VINAYAK R. CHITALE, M.S.F.I.C.S. SOLAPUR-413001**

**PUBLISHER : SOLAPUR FOUNDATION & RESEARCH CENTRE 165, D RAILWAY LINES, SOLAPUR MAHARASHTRA - PAGES 61.**

Author has made an honest & sincere attempt to highlight the pitfalls in surgical procedures & in care and has explained how such can be avoided & quality of care of a surgical patient improved.

He has worked in his early formative years under plastic surgeon, genito urinary surgeon, an orthopaedic and paediatric surgeon prior to settling down in practice. He is of firm belief that superspeciality have contributed enormously in day today problems in surgery and art and knowledge developed by these superspecialities percolate to a general surgeon and through his to the suffering humanities.

With this in mind he has produced a 61 page account of how it can be done. It is profusely illustrated, carefully drawn sketches and with pre & post operative photographs wherever necessary, radio graphs have also been used to bring out the best.

It is a useful reference book for the surgeons who are attempting to add new surgical procedures to their armamentarium.

It is needless to say a very useful little book for residents to learn about the various surgical, procedure as and grasp the essentials of surgical management.