Article published online: 2024-02-19

GILLIES MEMORIAL ORATION

Dr. J. L. Gupta, F.R.C.S., F.A.M.S.

Hon'ble Chief Guest................Mr President, Ladies and Gentlemen,

I am extremely grateful to the Association of Plastic Surgeons of India, for the great honour they have done, by inviting me to deliver this Oration in the memory of Sir Harold Gillies, who has been universally acknowledged as the "Father of Modern Plastic Surgery."

Some of you, had the privilege of coming into intimate contact with Sir Harold and may even have received training at his hand, but most of you will be surprised to know that I have been invited to pay my tribute to this Legendary figure whom I had the opportunity of meeting only twice, once at the Summer Meeting of the British Association of Plastic Surgeons and secondly at the International Congress. Suffering of World Wars have given some precious dividends of today. Efforts and contributions of Sir Harold in various field of Plastic Surgery are well known to this learned gathering. From amongst these invaluable gifts, outshines his teaching in the field of Burns. Let us look back to these deformities :

Some of you, may have come across much worst contracture and deformities than seen today. They are crippled, deformed, handicapped, disfigured and socially not acceptable to the society. The story of treatment of these cases is unfortunate. These poor patients were shoved into dark and smelly corners of the worst surgical ward in a hospital and left to die or scar in their own serums and sepsis. They were treated in General Hospital and as the grafting was not in general use ; the patients that lived ended up horribly scarred. The magnitude of problems in developing countries like ours is a collosal challange.

We still do not have Central Registry of Burnsinother words the magnitude of problems have not been fully understood, appreciated and defined.

Whatever the causes, it is an eloquent testimony to our efforts that more than 50,000 persons are treated for burns in our hospital every year, but there are many more who die without any help in the sprawling country of ours and the number that are treated by general practitioners, naturopaths, quacks and "self help" can only be a matter of conjecture.

The true incidence of burns and scalds in developing countries is not known and will probably never be known till all burns are made notifiable to the authorities by law ; but on a crude estimate, it is believed that more than 1,00,000 people suffer from more than minor burns, throughout the length and breadth of our country and about 10,000 people die every year, the majority of which are women and children.

Though the acute Burns is not strictly a Plastic prdblems; but to ensure early grafting it is necessary that the Plastic Surgeons gain general control of these patients from the start. This necessitates the development of a team well versed in the physiology and pathology of burns. Early skin grafting will reduce the hospital stay. The secondary

contracture thus developed will be much less in number and less severe. Early skin cover of burns can be made into a routine, and could conceivably be carried out by trained general surgeons. General surgeon too, do feel convinced, and are anxious to pass them over to us, on the merits of our technical skill of taking skin grafts and preparing the raw surfaces for its reception. In the department for the last 15 years we have been engaged in a team, to achieve some of its goals :

Traditional Method of treatment of Burns as it stands today :

1. Prolonged hospital stay, more expenses, low turn over, more loss of the wages by the patient.
2. High rate of serious early complication like toxaemia, infection, septicaemia.
3. High Death Rate in extensive cases.
4. Healing by more fibrosis, therefore more disabling contractures, deformities and disfigurements.
5. More wounds and ward infection, more manpower needed.

In order to reduce further the hospital stay and have a quick turn over in the existing number of beds the team has extended the method of serial tangential excision to about 20% deep burns particularly of extremities.

Expected Advantages of Serial Tangential-Excision and Skin Grafting :

1. Reduction in death rate.
2. Less incidence of complications like, toxaemia, infection and septicaemia (reduction of burnt body surface area at very early phase).
3. Less wound and ward infection-Less work load and less manpower needed.
4. Healing by less fibrosis and therefore less disabling contractures, deformities and disfigurements - less secondary operations.
5. Less loss of the wages by the patients.
6. Hospital stay is shortened by about 3 to 4 weeks.
7. Saving in hospital budget resulting in National Economy.
8. Quicker turn over of patients, over all much economical way of treating burns with superior or atleast comparable results

Limitations of Serial Tangenital Excision and Skin Grafting :

1. Mentally handicapped patients and children below 5 years of age are inco-operative in pin prick test.
2. Burns with infected eschar can not considered.
3. Full thickness burns involving subcutaneous tissues and deeper layers.
4. Non availability of adequate donor areas.
5. Non availability of adequate amounts of blood for replacement.

Inconclusion :

We feel convinced that early cover of burn with skin graft is a must and is of great advantage. Convincing trips must be made in various hospital in the cities/towns and in the district hospitals in periphery to encourage the local surgeons in early grafting. All general surgeons must be trained (if required have an Orientation Course) to take skin grafts. The challenge of burns must be shared by all plastic surgeons in the country. It is easy to forget that only through yesterdays' struggle are today's routine established

Treatment of burn needs no special sophisticated equipments. I quote when Padgett came out with his dermatome, Gillies wrote to Blair for his opinion on this gadgett. "Well, Gillies, it is a very nice instrument. I have seen it used and it seems good ;

but like the Rolls Royce motor car it needs a good Chauffer." Plastic Surgeons feel that they could cut skin quite satisfactorily with an ordinary skin grafting knife. However, what it needs is a team of dedicated workers who with the help of modern scientific knowledge, laboratory, fluid therapy, blood bank and antibiotics can save more and more lives. Ladies and gentleman, in my opinion sophisticated equipment though having its own importance, cannot be a substitute for a thoroughly dedicated hard working team.

In our country, burns are a national problem. The majority of burns and scald injuries admitted to our hospital are the victims of domestic accidents. It is most unfortunate that children and our women folk should mainly bear the brunt of our indifference and reluctance, to insist upon more rigid security measures, use of non-inflammable fabrics, measure to screen our fires, to protect our kitchens from prying children, and teach our women folk not to go about in the kitchen with loose ends of their "dress or Sari."

Most of the civilian and domestic burns are preventable. The cost in terms of money and man-hours is high enough; but the loss in terms of human misery is appalling. No mathematical calculation can adequately assess the profound suffering endured by patients with severe burns, with frequent change of painful dressings and several resurfacing operations. It is quite clear that no amount of safety precautions will completely eliminate burns; but a little care and forethought may reduce the incidence. An accident is generally not the outcome of a single factor. but the end result of several factors interacting with each other.

In burns, the agents may be :

—Petromax.

—Careless lifting of Angithi.

—Boiling soap water cane-Scalds (Steam under pressure).

—Steam from Pressure Cooker-Scalds. (Steam under pressure).

—Hot Ghee while cooking (Open air cooking).

—Ironing.

—Gas Cylinder accident.

—Faulty switches.

—Children playing with switches.

—Crude Water heater.

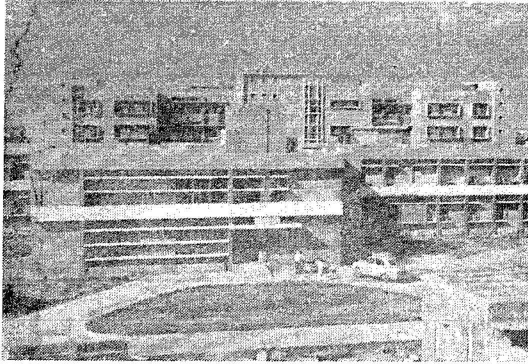
—Loose electric wires (Unplanned quick electrification).

—Crackers.

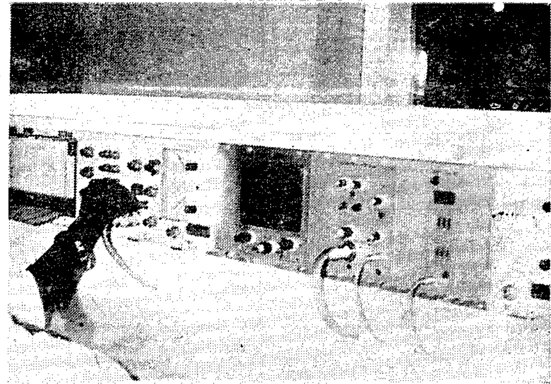
—Scalds from boiling sugar cane juice.

You will now agree that a large percentage of the burns both domestic and industrial are preventable by simple modification of the agents or environment, and by public education. The public, social workers, professional persons, industrialists, government and non-government agencies should undertake a programme for prevention of such accidents. Such a programme is overdue and would be completely justified not only for the prevention of human suffering but also the vast financial saving that would accru. Public education by all available channels of publicity such as, Press. hoardings, radio, T.V. and films is necessary to increase public awareness of the danger of burns injuries and their prevention. A comprehensive programme for the prevention of burns needs to be undertaken on a nation wide scale.

Ladies and Gentlemen, I thank you all, for listening to my lecture, and for giving me the opportunity to deliver this Oration.

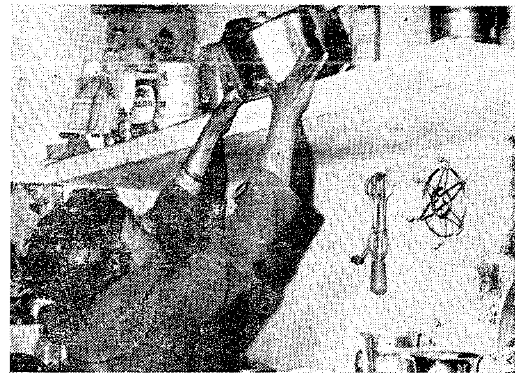


Deptt. of Burns, Plastic and maxillofacial Surgery, Safdarjang Hospital.



Central Monitoring station in Intensive Care Unit.

Open fire for Warming.



Shelves at higher level.

Cooking at floor level

Stove accident.