

Pressure Garments Prevent Heavy Scarring

Dr. K.C. HUTCHIN

RECENT fire disasters in several parts of the world have emphasised again the best methods of dealing with victims of burns and scalds. A serious after-effect of these injuries can often be excessive or hypertrophic scarring.

In the normal process of healing, following destruction of the full thickness of the skin by burns or scalds, collagen fibres are laid down in a regular latticed structure. In some cases these fibres multiply excessively, packing the spaces between the tissues and forming ropes of whorls and nodules, but usually the pressure of the overlying skin prevents such multiplication.

Without this overlying pressure to keep the healing process under control, however, the scar may take on a disfiguring, lumpy appearance.

Contractures are another complication of the healing process after severe burns and scalds. It is normal for scar tissue to contract, but this may become excessive in some cases causing ugly puckering, while around joints it may actually reduce mobility or even make it impossible to extend the joint fully.

Garment Fitting

In some cases contraction of the scar can restrict the flow of blood through underlying arteries and veins. This process may be progressive, ultimately causing very considerable disability which could require contracture release operations to restore function.

A British company manufactures pressure garments to prevent or cure these complications in cases in which extensive scarring has occurred in structures like hands and fingers, where delicate movement is essential for normal function.

These Presscar garments are made to measure for individual cases but the company also produces ready-to-wear pressure garments made of Tubigrip, an elasticated cotton material, in a wide variety of sizes for different parts of the body.

The normal routine is for cases to be reviewed four weeks after discharge from hospital. This gives the doctors an opportunity to assess the scarring and to decide if a pressure garment is necessary. Patients with severe burns have usually been extremely ill and could have lost weight considerably.

In children, growth may have been temporarily retarded. During the four-week interval after dis-

charge from hospital the weight lost can be regained—an important point when fitting a made-to-measure pressure garment.

Hot Weather Precaution

To be effective in preventing or curing hypertrophic scarring, pressure garments should be worn constantly, both day and night. They should be removed for only short periods, not exceeding half an hour, for bathing and massaging of the scarred area with special cream or oil supplied by the therapist. These ease irritation and provide the patient (or the parent if the patient is a child) with the psychological support of being actively engaged in the treatment.

Presscar pressure garments, which are made of Lycra—an elastic material manufactured from man-made fibres—are comfortable to wear, but in hot climates could be troublesome.

It is recommended that in high temperatures the patient's outer garments be left off and cold water applied to the pressure garment. The patient should be kept as cool as possible in the shade.

Both the made-to-measure and ready-to-wear pressure garments may also be valuable in the treatment of vascular disorders of the legs.

New Probe into Arthritis

Arthritis in its various forms is one of the world's commonest diseases. Although cold, wet weather often makes the symptoms worse, the underlying disease process is likely to occur in all climates.

It is possible that the worldwide incidence of the disease is in the region of 480 million cases.

Any successful research into the cause and cure of arthritis will benefit the sufferers of this crippling disease in many countries. It is welcome news, therefore, that one of Britain's voluntary organisations, the Arthritis and Rheumatism Council for Research, is to spend £23.7 million in the next two years to discover its cause and cure.

The normal function of the immune system of the body is to protect it against foreign substances. The system is mobilised when anything potentially harmful enters the body. However, in certain diseases the forces of the immune system turn inward so that they are mobilised to attack the body's own tissues.

Women Hit Hardest

One of these auto-immune diseases is rheumatoid arthritis, a crippling condition most common in women between the ages of 35 and 50. It is three

The author is Medical Consultant 'Daily Telegraph' London.

times more common in women than in men. No age is exempted.

There is a juvenile form that affects children and it can manifest itself in old age. In this condition the cells of the immune system appear to attack the structures of the joints, mainly the smaller ones, so that the tissues of the body are being destroyed rather than protected.

The cause of this abnormal reaction of the immune system is not known, and although an increasing number of drugs is available to relieve the symptoms no cure has yet been discovered.

Biochemical Studies

Research aimed at finding the cause of the other principal form of arthritis, osteo arthritis, will also be intensified. Until recently it has always been thought that this degenerative disease commonest in old age, was part of the ageing process and due to wear and tear on the cartilage—the cushioning material protects the moving parts of joints.

In recent years, however, a new concept of degenerative joint disease has begun to evolve as information on the wide variety of causes has become available through research.

Understanding of the degeneration of joints that occurs in osteo arthritis has been greatly helped by biochemical studies of cartilage, carried out at the Mathilda and Terence Kennedy Institute of Rheumatology at Hammersmith in west London, and funded by the Arthritis and Rheumatism Council for Research.

Immunisation against Miscarriages

Professors James Mowbray and Richard William Beard of St Mary's Hospital, London, have developed a new immunisation technique for treating women who have recurrent miscarriages.

Some cases of repeated spontaneous abortions (miscarriages) may be due to the fact that the mother's immune system is rejecting the baby as if it were a foreign body—in the same way an organ transplant is rejected. It is as if the woman is allergic to the paternal element in the foetus which, of course, comes from the sperm.

In the research carried out by Professor Beard (a gynaecologist) and Professor Mowbray (an immunologist) and their team at St Mary's Hospital, washed white blood cells and lymphocytes taken from the husbands' blood were injected into women who experienced repeated miscarriages, to encourage the production of antibodies. In theory, if enough antibodies are circulating in the mother's blood then rejection of the foetus might not occur.

The research team was able to prove that this theory is correct and 78% of women injected with their husbands' white cells had a successful pregnancy. This high rate compares with a success rate of only 37% of women injected with their own white cells. In the case of women who had one live birth before they started having recurrent miscarriages, the success rate was even higher (82%) among those injected with their husbands' white cells.

NURSING WORLD

Mrs. Morrow is ICN Nurse Adviser

Mrs. Helga Morrow, R.N., M.S.N. has been appointed nurse adviser on the staff of the International Council of Nurses in Geneva, Switzerland. In that capacity, she will work with member associations, committees of the ICN, and with international organizations associated with the United Nations.

Born in Breda, The Netherlands, Mrs Morrow later studied Nursing in the United States, receiving both a B.S.N. and M.S.N. (in maternal-child health Nursing) from Boston College, Boston,

Massachusetts. In addition to extensive experience in clinical practice Mrs. Morrow worked with Peace Corps volunteers in Kampala, Uganda (1966-1970). During 1976-1979 she taught in the post basic Nursing programme at the University of Ghana, Legon, Ghana and also while in Ghana she established a paediatric nurse practitioner programme.

Helga Morrow has assisted ICN in a variety of ways since 1979 and for the past two years, she has served as project coordinator for ICN's worldwide series

of primary health care leadership training workshops and for the SEW workshop which was held in Kenya.

In announcing the appointment of Mrs. Morrow the ICN Executive Director, Constance Holleran said she knew that this appointment would be warmly endorsed as Helga Morrow is already well known to so many of the member associations.

Mrs. Morrow is married to Dr. Richard Morrow of WHO, Geneva and she has four grown children.