WAR WOUNDS AND AIR RAID CASUALTIES

The following article is a supplement to the series of lectures on war wounds and air raid casualties printed in these columns

ORGANIZATION OF THE EMERGENCY MEDICAL SERVICES

II. FIRST-AID POSTS

BY

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Under the Air Raid Precautions Act, 1937, and the Air Raid Precautions (General Schemes) Regulations, 1938, county councils and county borough councils (and a few smaller authorities) are charged with the responsibility of setting up certain medical services. These services include arrangements for the collection of casualties by means of what are called first-aid parties or stretcher parties, their transport to aid posts or receiving hospitals, and their treatment in the aid posts or in country areas at first-aid points. Local authorities are not now responsible for hospital treatment or for inter-hospital transport, which are the direct responsibility of the Ministry of Health and the Department of Health for Scotland; but all branches of the casualty service are closely related and, apart from the recruiting of personnel and their preliminary training and arrangements for first-aid parties, are now all controlled by the Health Departments.

The difficulty of planning a suitable first-aid service lies in the absence of any data or experience on which to estimate the number of the casualties likely to be caused or the places where they may be expected to occur. Conditions in Spain, China, or Abyssinia, where there was practically no ground defence and very inferior air defence, were very different from the conditions which now prevail in England. In addition the possible use of gas complicates the arrangements to be made. It is significant that gas was not used in Spain or China, and not, it may be supposed, from motives of humanity. It was used in Abyssinia against troops without cover, without personal protection, and without any training in defence measures. But while it would be unsafe to conclude that it would not be used in England, even if only in an attempt to cause panic and to hamper defence measures against other forms of bombing, some protection against mustard gas is comparatively easy and the casualties caused should not be very severe. Gas is a bulky substance to carry in an aeroplane, and its military value against civilians in houses is insignificant compared with high-explosive or incendiary bombs. Nevertheless casualties may be caused by mustard gas, and arrangements for their treatment must be made.

One of the main anxieties of the larger general hospitals is that their proper work of dealing with severely injured cases requiring in-patient treatment might be seriously hampered by the arrival of large numbers of less seriously injured persons demanding attention. In order, then, that these hospitals may function to the best advantage an efficiently organized system of first-aid parties and first-aid posts is essential.

First-aid Parties

Each first-aid party consists of four men, fully trained in first aid. They are stationed at depots throughout the district, and on receiving information that casualties have

occurred at a particular place, will proceed with their stretcher, either on foot or in a car provided for the purpose, to the site, to which one or more of the small street ambulances will also be sent. Each member of the first-aid party carries a pouch with first-aid requisites, and is trained to give such attention as is necessary to save life or to allow the casualties to be moved. Members of the party must exercise discrimination in the initial disposal of cases, either sending them home or to a first-aid post or a hospital, as may be appropriate. It is important that, during the periods of activity and pressure immediately following a raid, hospitals and aid posts should not have unnecessary work thrown upon them, as would be the case if casualties which ought to have gone to aid posts arrived at hospitals and others whose injuries necessitated immediate hospital treatment were sent to aid posts. Serious cases should be transferred to hospitals direct if they are likely to require in-patient treatment.

It would be ideal for a doctor to go to the site of a raid and be the first to see the patient, but enough doctors will not be available after the calls of the fighting services, the civil hospitals, the aid posts, and districts receiving evacuees have been met.

Ambulance Transport

Every scheme-making local authority has earmarked a number of commercial vehicles to serve as ambulances. Fittings have been made which convert the vehicle into an ambulance capable of carrying two or four stretcher cases for at least a short distance in comparative comfort. These street ambulances are stationed at depots throughout the district. They will take cases direct from the scene of the accident to hospital or to an aid post, as advised by the leader of the stretcher party. Each ambulance has an orderly in attendance in addition to the driver.

First-aid Posts

The functions of aid posts may be stated to be: (a) to act as a buffer to the hospitals and so prevent them from being overcrowded by the less seriously injured. (b) To give immediate and initial treatment to such seriously injured casualties as may for one reason or another come to the aid post before going to hospital. (c) To treat and send to their homes the slightly injured, including persons suffering from nervous shock. (d) To provide cleansing facilities for persons who have been contaminated by gas, either wounded or unwounded, unless separate cleansing stations have been set up for the unwounded.

In order to fulfil these conditions, and to utilize buildings which can be adapted at short notice and which the public are already accustomed to associate with medical treatment, aid posts have been sited at hospitals or clinics wherever possible or in buildings close to hospitals. It is a guiding principle in military surgery that casualties must be evacuated from the front line as soon as possible. Conditions on the home front will be different, inasmuch as there will be no front line with communications leading back to the rear by way of the casualty clearing stations. Nevertheless, it will still be desirable to move casualties out of the danger area as soon as possible. Hence major

surgical work should not be undertaken at aid posts. From the very position of the aid post, however, as the first medical unit in the casualty organization, patients may well be admitted who require immediate surgical intervention before they can safely be moved to the casualty receiving hospital. In order to give such treatment, to superintend the work of the staff, to administer dangerous drugs or tetanus antitoxin, and above all to make an accurate diagnosis of the extent of the injury and of the type of treatment required, medical men are placed in charge of first-aid posts, and the necessary equipment provided.

Mobile Units

As well as fixed aid posts established in buildings, mobile aid posts or mobile units have been formed in many districts to serve the needs of a wide area. A mobile unit consists of a van fitted with removable cupboards and containers in which is stored all the necessary equipment of a post. The units are usually placed at hospitals or at some convenient centre at which the nucleus of a staff can be quickly collected. Such mobile units will go to the scene of the accident, which may be in a small township some miles away, and attend to the casualties either in the open or in some convenient building. Patients will not be dressed in the vehicle itself, which is in no way intended to serve as an operating theatre, but merely as a conveyance for stores and personnel.

FIRST-AID POINTS

An aid point is little more than a box of dressings placed in the surgery of a doctor or in the house of a district nurse or at some point where the few casualties which may be expected can be collected and given first-aid treatment pending the arrival of a mobile unit or an ambulance.

Administration and Lay-out

First-aid posts should have facilities both for first-aid work and for the cleansing of persons contaminated by gas. Aid posts vary in their individual lay-out according to the accommodation available, but in general they consist of a receiving room, a treatment room, and a rest room in which patients can wait before going home or being removed to hospital. Patients will not be kept in an aid post for longer than is necessary. Arrangements for cleansing gas-contaminated persons are also made, in separate rooms if they are available.

FIRST-AID SECTION

This consists of: (1) A reception room to which casualties are admitted, the extent of the injury assessed, personal belongings and valuables collected in a bag, and a casualty record card, M.P.C. 44, made out; (2) a first-aid room where the necessary medical treatment is given, and notes made on the casualty record card, particularly the administration of morphine or any other information of value in subsequent treatment; (3) an evacuation or rest room in which patients can wait pending discharge home or to hospital: a separate casualty card, M.P.C. 46, will be used for patients being transferred to hospital, and will be sent along with the patient.

CLEANSING SECTION

Outside the reception room there should be an open shed where grossly contaminated outer clothing can be removed and put into bins before the patient enters the building, where any further clothes may be removed. A separate cleansing room where washing facilities are provided and prophylactic or bleach treatment carried out

may or may not be provided, but where a separate room is not available or cannot be easily provided, washing facilities should be available in the reception room. A dressing room where cleansed persons are provided with clothing may or may not be the same room as that used for the discharge of non-contaminated casualties. Separate accommodation for the sexes is not essential. Where the building does not lend itself to separation, screens or curtains can be made to provide the necessary privacy.

Personnel

First-aid posts come under the general administrative control of the medical officer of health, and are under the immediate executive control of a medical officer placed in charge of the post. In many cases local authorities have designated the doctors for this work in consultation with the Local Emergency Committee. The medical officers appointed are paid in peace time a fee of 20 guineas a year, and are responsible for the collective training of the personnel. In this way they get to know the personnel of their posts, and a team spirit is introduced which adds to its efficiency. A large post, excluding reserves, consists of a doctor and a staff of sixty (ten men and fifty women), a small post of a doctor and forty (seven men and thirty-three women), each divided into three eight-hour shifts. A mobile unit consists of a doctor and seven men or women per shift. The team should if possible include at least one trained nurse and a number of nursing auxiliaries. Where required for the large posts a small skeleton staff of ten per shift may be employed whole-time, but the others will be part-time volunteers. It is highly probable that most aid posts will never treat a single casualty, and it may well happen that in the course of a war lasting perhaps for some years many of them may be given up.

When the air raid warning signal is given the shift liable for duty should report at once, if they can reach the post before the raid commences; if not, they must try to get there as soon as the streets are reasonably safe. One of the advantages of having a post sited at or near a hospital is that some staff is always available, ready to start work as soon as the first casualties begin to arrive. First-aid parties or stretcher bearers do not form part of a first-aid post. They are more closely associated with other A.R.P. workers, such as rescue and demolition parties, and consequently are stationed at or near the depots, to which the earliest information of the raid will come. The medical officer of an aid post is not responsible for the training or organization of first-aid parties.

Aid posts vary so much in size, in lay-out, in the number of casualties they may be expected to treat at one time, and the conditions under which they may have to work that no uniform standard of organization is possible or desirable. What might be suitable in a large aid post in a congested city liable to be the object of repeated and concentrated attack would be quite inappropriate for an aid post in a small and remote country town. The work will be very similar to that of a busy surgical out-patient department, with the addition of a separate staff for dealing with persons contaminated by gas if any such cases should occur. Selected attendants will be required to be on duty at the door to prevent the entrance of unauthorized persons as well as to help with the reception of casualties. Clerks, messengers, and store-keepers will also be required. The medical officer in charge will have to conduct at least twelve training sessions in the year, and will probably find that the judicious choice of a suitable man or woman to serve as

adjutant and be responsible for the allocation of duties and the general supervision of the organization will relieve him of much non-clerical work. Nevertheless this will not relieve him of his primary responsibility for the efficient administration of the post. A quartermaster or store-keeper is an equally important member of the team. More than half the staff will be employed in non-medical duties, but it is desirable that all should be as highly trained in first aid as is possible. Training parades should include practical work in first-aid and anti-gas measures, a limited number of lectures by the medical officer, and practice in dealing with a rush of casualties, preferably in combination with the practices of first-aid parties and ambulances. Each member should be given an opportunity of obtaining practice and experience in the various duties of the post.

Conclusion

It is an axiom that every great war is different from the last. No well-defended country with efficient ground defences and an active and adequate air force has as yet been the subject of aerial bombardment, and though the speed of modern aircraft makes it probable that a number of machines may penetrate the defences, it is impossible to foretell what life in large cities will be like. Certainly conditions will be in no way comparable to that of troops in the last war exposed to long-continued periods of intense bombardment in comparatively shallow trenches, from which they might not move. In most towns in England attacks will be sudden and almost unexpected, and will be followed by long periods of complete safety. The casualty service must therefore be one which can be relied on to function in all parts of the country at short notice after long periods of comparative peace. Later on it will probably be necessary to modify the arrangements in the light of experience, but for the first few weeks the policy must be one of hoping for the best and preparing for the worst.

Correspondence

Physical Medicine in War Time

SIR,—The letters of Drs. Garton and Kellett Smith in your recent issues draw attention to the important part this special branch of medicine (then known as electrotherapy) played in the last war. The Summerdown Camp at Eastbourne was well known to me then, and was indeed an inspiring model of organization and efficiency in reconditioning the disabled from whatever cause, surgical or medical.

In the present war the need for efficient and speedy reconditioning of patients, whether Service or civilian, by physical means will be of the highest importance not only for minimizing pain and residual disability but also by returning patients to their technical jobs as soon as possible. Further, properly applied physical treatment can effect an enormous saving in pensions. The number of cases that can be benefited in this way will, all too certainly I fear, run into many tens of thousands, and will require a large organization collaborating closely with all branches of the profession, especially the orthopaedic, infiltrating practically every hospital in the country except perhaps those where the duration of stay is very short. Special convalescent camps, like that at Eastbourne, will undoubtedly be required where physical methods and re-education and occupational therapy will play the dominant part.

It is also important to remember civilian needs. For instance, the treatment of rheumatism and arthritis by physi-

cal methods has almost come to a standstill for the time being. The Red Cross Clinic, catering for 100,000 treatments a year, has been closed, and all will agree that rheumatism and arthritis tend to be exacerbated under stress. The requests at the clinic alone are enormous. What has been, or is being, done in these matters?

As chairman of the Physical Medicine Group of the British Medical Association, I have received a large number of letters from doctors, masseurs, and manufacturers of electro-medical apparatus, desiring to know the present position and proposals. The present position may be summarized as follows. The Physical Medicine Group Committee has for many months been building up a shadow organization that could become active and develop rapidly as need arose. Sir Robert Stanton Woods has represented the group on the Central Emergency Committee from its formation until his appointment as consultant adviser to the Ministry of Health, and has been indefatigable in securing in sectors and areas recognition of the importance of physical medicine and in building up the basis for rapid development. The recognition of physical medicine as a subject requiring separate consideration was undoubtedly due to the strong support given to the Physical Medicine Group by the B.M.A. There has also been close collaboration with the massage corps and the manufacturers. The Physical Medicine Group Committee discussed a shadow organization as long ago as last July, at the request of Sir Robert Stanton Woods, dealing with all branches of the subject, including rehabilitation and occupational therapy. This proposed organization can be put into action when required. It is therefore clear that the subject is neither forgotten nor being neglected.

The Group Committee has envisaged from the first a period of transition and then a gradually increasing demand, and they would ask all those interested in the subject to await developments with patience. There are, however, certain dangers inherent in a "second-line" subject such as physical medicine during the waiting period. Doctors with special knowledge anxious to throw their whole weight into the war at once take on work unconnected with their specialty. The same applies to masseurs and particularly to those key people—doubly qualified nurses and masseuses. Manufacturers of electromedical apparatus must also perforce look for other war work. These things are already happening, and herein lies the hurry, or rather the need for planning ahead, lest the efforts that are being made are stultified.—I am, etc.,

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London, W.1, Sept. 25.

Base Hospitals as Clinical Centres

SIR,—The widespread dislocation of normal life created by the war has given rise to a host of serious medical problems for which no solution has so far been found. The Emergency Medical Service, so happily conceived and carefully planned, has provided an admirable machinery for dealing with the casualties which are only too likely to occur when the war reaches our shores. But the emergency does not end there by any means. Great hospitals, which for years past have provided the most scientific form of medical and surgical treatment for a large section of the population, have been broken up or reduced to a casualty basis. Wards have been closed, medical and nursing staffs dissipated, vital departments stripped of their equipment, medical and nursing education interrupted and jeopardized, and thousands of people deprived of that skilled assistance which the hospitals of our great cities so freely provided.

What is going to be done about it? It is evident that we are in for a long and grim struggle, and the Government is basing all its plans on that assumption. A heavy responsibility therefore rests on those who are concerned with the health of the nation to take an equally long view of the situation and look far beyond the mere improvisation of emergency measures for the treatment of casualties.

It is here that the new organization of the Emergency Medical Service can fulfil a most important part. Under