

Military Medicine and Surgery

NOTES ON THE CARE OF THE CRIPPLED SOLDIER IN ENGLAND

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DETROIT

The British War Office and the Royal Army Medical Corps early realized that the responsibility of the government to the wounded soldier did not end when he was discharged from hospital with his primary wounds healed, but with his usefulness more or less impaired. They appreciated that to give a man, with a badly united femur, contracted trench feet, or a paralyzed arm, a pension sufficient to keep him alive, and leave him to shift for himself, was economically unsound. They, therefore, undertook the study and perfection of methods to restore each man as nearly as possible to a state of activity and earning power which should approximate or excel that man's state before he went into the war.

The problems were and are huge ones. First to be considered were the difficulties of reconstructive surgery. Each case presented points for study which were outside the experience of the general surgeon, and had to be worked out under conditions entirely foreign to civil life. The Medical Corps of the Army had done wonders in saving life and limbs, but their skill most easily applied itself to the acute injuries. They were apt to assume permanent crippling because they had been used to seeing similar cases in civil life remain cripples. Second, the men themselves had a natural tendency to avoid prolonged hospital treatment with repeated surgical procedures. They were willing to be content with their disabilities and look forward to a life of ease, supported by their pension and helped by their friends. They could not bring themselves to see that such a life stretching ahead for many years must sooner or later become irksome. They could not foresee as did the authorities the growing discontent—first of the individual, and second of a community—which would be fostered if large numbers of healthy young men should be kept in idleness by loss of function in one or more members. The third difficulty to be considered was the provision of suitable hospitals for the accommodation of great numbers of men who must be kept under treatment for long periods of time if good results were to be obtained. Secondary to this difficulty was the provision of workshops in which men under the process of reconstruction could be taught to do useful things adapted to their ultimate loss of function. In short, the authorities were obliged to work out the details of a comprehensive scheme for the surgical, mental and physical treatment and training of enormous numbers of damaged men, of a class which we in America see occasionally in industrial surgery, in order that at the end of the war the country's man power might be as efficient, busy, and therefore happy, as ingenuity and persistence can make it. They felt that on the proper creation of such a scheme depended very largely the welfare of the nation for many years to come.

To the everlasting credit of the government, urged on by such men as Sir Alfred Keogh, the Surgeon-

General, Col. Sir Robert Jones, the great orthopedic surgeon of Liverpool, Sir Walter Lawrence, King Manuel, and others, the problems just outlined have been taken up with great firmness and breadth of vision, and a splendid approach, which is constantly broadening in scope, has been made to the solution of the difficulties of rehabilitation of the crippled soldier.

It was due largely to the energy and courage of Sir Robert Jones that the War Office was made to see that surgery had not done its uttermost when a man's wounds were healed. He showed them how special training and aptitude for the work could create surgeons who would go much further than this, and acquire through long contact with chronic cases an ingenuity and patience which would enable them to take up the work where the general surgeon left off his brilliant accomplishments.¹ He showed that only men so trained could gain the best results. At first he was given his opportunity to prove his theories on only a small scale, and even then was handicapped by transfer to other duties of the men who worked under him. Gradually, however, his results began to speak for themselves, and he was given more and more a free hand. Growth was brought about by the increase in the number of beds under his control, sometimes by setting aside numbers of beds in general military hospitals and sometimes by the creation of complete reconstruction hospitals, until now there are in the British Isles something like 11,000 beds. This number is being increased rapidly and indefinitely, with a future minimum of 30,000.

It is my privilege to be stationed at the largest of these hospitals, the Military Orthopedic Hospital at Shepherds Bush, London, with its 1,100 beds and its permanent staff of five chiefs and the necessary assistants, under the orders of a major, responsible to the R. A. M. C., who acts as superintendent, disciplinarian, and business head. The hospital is divided into five services, each under the charge of one of the chiefs, and each with about 200 beds. The chiefs are all surgeons who in peace times had leanings toward orthopedics, and most of whom have served as army surgeons in the war. They have worked up to their positions through special aptitude for the work, and through periods of training in minor orthopedic positions under Sir Robert Jones. He it is who has general supervising charge of all the hospitals, and is the originator in all matters of policy. The hospital is divided into two blocks—the South and North. In the South Block are twelve wards of thirty-six beds each where the severe cases are kept. Each two wards have a head nurse and three or four nurses with voluntary women assistants. While waiting for operation or while convalescing, if able to be out of bed at all, men are transferred to the North Block, where they care for each other under the direction of two head and two or three ordinary nurses. At night the North Block is in charge of orderlies, who have certain disciplinary powers. There are also tents where many of the convalescents live. Discipline is roughly on army lines, but is complicated by the fact that it is against the law to punish any soldier in hospital except by confinement to bed, if necessary in a sort of prison ward, and by deprivation of privileges such as leave. On the whole, considering that most of the men are pretty healthy animals, they behave extremely well.

1. Of late, too, it has been realized that a great proportion of the wounded men need special orthopedic care from the very first, in order that the best ultimate results may be obtained.

The hospital is thoroughly equipped with a large massage department, a gymnasium, a hydrotherapeutic plant, and an electrical department. These are interdependent and ample. The men have regular schedule cards which admit them to any or all of these departments as ordered by their surgeon. Each department is in charge of an expert in the particular form of treatment who prescribes the details, which are carried out by large numbers of trained assistants. For instance, the massage department has about twenty masseuses or masseurs, one of whom is a blinded soldier. All departments are extraordinarily well run, especially the electrical, under Capt. W. R. Bristow, whose coil for diagnostic and treatment purposes far surpasses anything I have seen. When used under his direction, electrical treatment is of real value.

As an adjunct to these departments for special treatment are large workshops—woodworking, forge, splint making, repair shops, artificial limb shop, etc. In these large numbers of the patients work regularly. Their object is fourfold: First, to keep the men busy, and in that way to take their minds off their troubles. It is well known that the victim of long standing disability is apt to become depressed and the victim of his sympathizing friends. He does not do well physically because he is in a nonreceptive psychologic state. If he works he is usually happy. Second, work provides one of the best means for passive and active motion and massage. Third, work keeps a man at his trade, or goes far to teach him a new one. Fourth, the product of the shops supplies many needs of the hospital. In the English army no man in hospital can be forced to work, except for short periods as a prescription. He must work voluntarily. Here lies the great difficulty of the curative workshop—to get a man to go to them. It has not been fully solved, and there is much to do yet in making work interesting. Gradually the men are learning the value of work, and are taking it up more willingly. The best application of work to the individual is also a hard matter, for two reasons. First, a man with an injured hand constantly tends to save that hand, and use the good one, and thus gains nothing. Second, the tendency of the business authorities of the hospital is to get as great a product from the shops as possible. Therefore, the foremen are very apt to put patients on the job they can do best, regardless of its curative value. This, too, is being solved by the appointment of a medical supervisor, who prescribes the work, and by an increasing openmindedness on the part of the authorities.

The question of long residence in hospital is also a difficult one. It is appreciated that beds in a hospital which are costly should not be blocked by men who are waiting long periods for the regeneration of nerves or the subsidence of low grade infection. Yet if the men are allowed to leave the hospital, it is often difficult to get them back. The so-called Command Depots partially solve this problem. These depots are large camps where the men are kept under military discipline, doing what little work they can, but protected from the strain of active life. They care well for certain types of cases which need no nursing. Convalescent homes, too, care for large numbers. These are rather expensive and tend to hospitalization of the patient. The Command Depots furnish some of the details of treatment, such as baths, electricity, massage etc.

From this brief statement an idea of what has been accomplished toward the regeneration of cripples in England can be obtained, and the results are excellent.

Surgeons are made especially fit to deal with the men, by a well organized course of continuous training, and the trained surgeons are kept at the job.

Hospitals have been acquired by the government for the treatment of this type of case only.

The men themselves are gradually being educated to an interest in the improvement of their own condition. Education is apparently the sole means for producing this result.

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THE VENEREAL DISEASES

THE TREATMENT OF GONORRHEA

GENERAL CONSIDERATIONS

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Every patient with acute urethritis should be ordered immediately to hospital for treatment. The earlier cases are seen, the better are the chances for rapid cure and the less the dangers of posterior urethritis and the complications of gonorrhea. With gonorrhea, as with syphilis, soldiers should be encouraged to report on the slightest suspicion of trouble, and those who have been exposed should be watched for a week for manifestation of the disease. On its appearance, treatment should be instituted immediately.

The patient should be given instructions, preferably printed, on the part he must take in the conduct of his case. In all cases he must be warned of the danger of carrying the disease to his eyes, and of gonorrheal ophthalmia; and of the necessity of washing his hands after touching his penis or anything contaminated with his pus.

At the first examination of every case of gonorrhea, the patient should be stripped in order to permit a general survey of his condition. Note should be made of the amount of discharge and of the condition of the glans and prepuce. The presence or absence of chancre and chancroid should be determined, and the testicles should be examined for a beginning epididymitis. Then the patient should be instructed to pass his urine into two glasses.

Two-Glass Test.—The two-glass test should be made at each examination for the purpose of determining: (a) if the posterior urethra has been affected; (b) the amount of pus secreted.

The urine passed during gonorrhea appears turbid from admixture with pus, and in it are little clumps or masses of desquamated epithelium. After standing, the pus settles to the bottom of the glass and a cloud of mucus appears floating above it. As the patient goes on toward recovery, the pus disappears, but the hypersecretion of mucus continues and occasions a cloudiness of the urine, giving it a mucilaginous appearance. After the mucus disappears, the "clapshreds" persist for months, because isolated portions of mucous membrane are not covered with epithelium and are still secreting pus.

In the two-glass test, if the anterior urethra alone is affected, the first glass of urine will be cloudy and the second glass clear; but if the posterior urethra is involved both glasses will be turbid from the presence of pus. This is accounted for by the action of the "cut-off" muscle which forms a barrier between the anterior and posterior urethra. It prevents pus in the anterior urethra from flowing back into the bladder; so