PROCEEDINGS OF THE ASSOCIATION OF INDUSTRIAL MEDICAL OFFICERS, 1944

BIRMINGHAM GROUP

The summer meeting of the Association, due this year to be held in Birmingham on May 19th and 20th, was unavoidably cancelled, but a group meeting was held instead, on May 20th, at the Birmingham Accident Hospital when the subject of accident services was discussed. Before the meeting Mr. E. A. Nicoll showed a new British Council film 'Accident Service' at the Tatler News Theatre, where some 250 members and guests attended. At the hospital Mr. W. Gissane described the policy set up by his Board. The hospital would deal with two-thirds, perhaps three-quarters, of the city’s accidents. One main problem was the minor injury, fingers in particular, and the control of wound infection. This latter was the subject of a long-term research by Professor A. A. Miles, acting for the Medical Research Council. The accurate treatment and rapid supervision of say 600-1000 cases a day meant a well-planned system, such as he considered was now to be provided. Mr. Gissane showed plans of the new outpatient and reception blocks (opened by the Minister of Health on August 14th, 1944). All new cases would receive immediate treatment in a special department— with examination cubicles; x-ray room, with mobile unit if required; two operating theatres with sterilizing room and changing rooms for the surgeons; plaster department; and photographic unit. Serious cases would be admitted to the wards, and this includes admission of the 24-48 hour case; others go home or, perhaps, back to work. Records would be kept by the Hollerith system. Follow-up systems are important. Patients and their friends can use a bright and cheerful waiting hall with bar-canteen. Surgeons have well-equipped examination rooms, off which branch the main x-ray department for the hospital, plaster rooms, patient’s lavatories and waiting room. All re-dressings are seen at each attendance by a surgeon. A special plan for this has been devised ensuring a quick flow through for inspection. This department is adjoined by three separate dressing stations for clean wounds, dirty wounds and burns—all ambulatory cases. Above this block was a gymnasium, already working, near which would be rooms for outpatients of rehabilitation. Finally, the hospital was intimately concerned with economic rehabilitation: the sheltered workshop for injured persons had come to stay—arising out of the Austin experiment—and plans were already on the table to set up communal rehabilitation workshops for Birmingham as a whole. Some 70-80 members of the Association and guests then toured the hospital and later were entertained, with members of the hospital staff, to luncheon by the group. Dr. R. E. Lane thanked the group for its hospitality and said how disappointed members had been that the main meeting had to be cancelled—and in particular the annual dinner at which he understood nearly 100 members were to have attended. One of the main objects of the Association was to maintain social contacts between medical officers. This meeting had done that in no small manner and had given a lead to the setting up once again of pre-war standards.

On Friday, June 16th, Mr. R. A. Lewty spoke on 'Dental Services in Industry.' He did not need to justify the need for dental treatment: it was essentially supplementary to medical service. Dental treatment did not just mean alleviation of toothache; it means rendering mouths hygienic and efficient, and advising the workers how to keep them so. If a firm was not willing, nor economically able, to install a dental clinic arrangements should be made with local practitioners. The difficulty of this was to arrange for the employee to have time off to attend outside clinics. Evening dental sessions were not in the best interests either of patient or employer. Where a clinic is set up at the factory the dentist should be allowed to visit all departments. He should be a member of the works council. His clinic should be central; it should have two surgeries, waiting room, and clerk's office; and, if possible, a dental workshop. Equipment should be of the best; an x-ray outfit is essential. At first too many people should not be examined prior to treatment. He himself had made this mistake. In his view some 30 workers should be given an initial examination and treatment started right away. Then each day, 5 or 6 new applicants could be examined. Thus work volume could be more readily controlled. The dental health of juveniles was of much importance; industrial dentistry follows on from the school clinic. Here is a valuable medium for education—at the chairside. Mr. Lewty felt that dental examination should be made compulsory for new entrants. The 'new freedom' was not freedom from responsibility. Dentures are frequently broken by accident; they can rapidly be repaired at the factory clinic. In Normandy, mobile dental repairing units had been sent out to deal with this urgent need, thus proving that the number of young men wearing dentures (but otherwise in first-class physical health) is too high. With toxic substances such as lead and phosphorous dental hygiene is highly important. Wholesale extractions frequently mean loss of working time and are of doubtful value. An industrial clinic affords a unique opportunity for collecting information about dental standards in the community. He had not been able to find sufficient time—because of the great demand for his services in a factory with over 10,000 employees—to carry out such investigations, but in the near future he hoped, for example, to gain information as to why so many young people wore dentures. In 1943 his department had completed over 4000 fillings, thus proving that the workers are willing to submit to conservative treatment when it is made easy for them to do so.

GLASGOW GROUP

At a meeting held on January 28th Dr. William Blyth read a paper on 'Neurosis in Industry.' He laid stress on the implications of war-time restrictions such as travel, black-out, feeding and canteens.

On February 23rd a symposium on 'Industrial Crippling' was arranged. Dr. A. G. Mearns described the place of the cripple in industry, and the relationship, in this respect, between hospitals, general practitioner, and the industrial medical officer. Miss Jean Alexander, Secretary of the Scottish Orthopaedic Council, presented the view of the social service worker. There was an urgent need for hospitals and industry to get together. The present isolationist attitude must go. There were three solutions to rehabilitation: individual placing in selected light jobs inside the works; retraining workshops, e.g. the Austin Motor Company scheme; and rehabilitation centres, probably residential, for workers in heavy industries. Miss Marjorie Simpson, Tutor in Industrial Nursing, Royal College of Nursing, gave her views on the industrial nurse's contribution.
The nurse can be of great service to her medical officer in pre-employment examination, and it is can watch for the accident-prone worker. She maintains contact with the injured man in hospital, and helps with after-care on his return to work. Adjustment in hours of work was important in industries with high accident rates and workers who had orders require assistance; there is need for more special diets at canteens. Of much importance is the nurse's responsibility in educating manager and worker in the meaning of rehabilitation.

Dr. A. B. Doig, one of H.M. Medical Inspectors of Factories, read a paper on 'Factory Law in relation to Health' at the meeting held on March 29th. The health provisions of the Factories Act are based on ordinary principles of sound common sense—for example, heating, lighting and ventilation. Factory health laws are every bit as important as public health laws. With the tremendous expansion of medical supervision of factories in recent years, especially by busy general practitioners, there was little opportunity for study of legislation—particularly this classical example of Basic English prose! It was to those people particularly that Dr. Doig spoke. A factory means any premises in which persons are employed in manual labour for the making of any article; they might be, manufacturing, finishing, cleaning or washing, or the breaking up or demolition of any article; or the adapting for sale of any article. The Factory Act also covers shipyards and dry docks, building and engineering construction works, and premises where gas is stored in large gasholders. He described present-day medical supervision, the appointment of Factory Inspectors and Examining Surgeons, and their duties and responsibilities.

On April 26th mass miniature radiography in factories was discussed. Dr. Alex Maclean said that there were certain obvious groups which could be selected for this type of survey, for example the group of tuberculous contacts; this, however, is properly the concern of the medical officer. He described in detail the group of workers whose treatment was to begin radiography. There is considerable importance in the restoration of function. Successful dovetailing of (2) and (3) produced the good fracture clinic. These criteria in treatment applied also to soft tissue injuries. Definition of rehabilitation was difficult, but Mr. Broomhead suggested that 'restoration of function' covered the field. Function was restored by ordinary physical therapy; by intensive physiotherapy (sometimes called rehabilitation); by occupational therapy; and by vocational training. In this last phase contact should be made with medical industrial officers. Physiotherapy must take place in hospitals as a rule, although more intensive forms might be carried out at special centres, i.e. for the more seriously injured patient. Occupational therapy could be done both in hospital and at special centres. Vocational training was done at residential centres, Ministry of Labour training workshops, and in special workshops provided within industry itself. Injured workers could be divided into several groups—those who recovered without any physiotherapy; those who needed ordinary physiotherapy; those who required either resident or non-resident rehabilitation; and those who needed training. This phase of training, or retraining, might be carried out at a communal centre or in his own home. It was much preferred to be treated in their own homes, but long-term cases might have to go to special centres in the country. There should be an extension of the accident section of hospitals rather than specialized accident hospitals themselves. Segregation of finger injuries, under an orthopaedic surgeon with specialized knowledge, was highly desirable. In Leeds, for example, no headway had so far been made in dealing with this problem of fingers and wound infection.

LEEDS GROUP

At a meeting held on February 26th Mr. R. Broomhead opened a discussion on rehabilitation. The best form of rehabilitation, perhaps, was 'a good walk.' Treatment of fractures consisted of (1) reduction, (2) maintenance, and (3) restoration of function. Successful dovetailing of (2) and (3) produced the good fracture clinic. These criteria in treatment applied also to soft tissue injuries. Definition of rehabilitation was difficult, but Mr. Broomhead suggested that 'restoration of function' covered the field. Function was restored by ordinary physical therapy; by intensive physiotherapy (sometimes called rehabilitation); by occupational therapy; and by vocational training. In this last phase contact should be made with medical industrial officers. Physiotherapy must take place in hospitals as a rule, although more intensive forms might be carried out at special centres, i.e. for the more seriously injured patient. Occupational therapy could be done both in hospital and at special centres. Vocational training was done at residential centres, Ministry of Labour training workshops, and in special workshops provided within industry itself. Injured workers could be divided into several groups—those who recovered without any physiotherapy; those who needed ordinary physiotherapy; those who required either resident or non-resident rehabilitation; and those who needed training. This phase of training, or retraining, might be carried out at a communal centre or in his own home. It was much preferred to be treated in their own homes, but long-term cases might have to go to special centres in the country. There should be an extension of the accident section of hospitals rather than specialized accident hospitals themselves. Segregation of finger injuries, under an orthopaedic surgeon with specialized knowledge, was highly desirable. In Leeds, for example, no headway had so far been made in dealing with this problem of fingers and wound infection.

LIVERPOOL GROUP

At a meeting at Liverpool University on May 16th Professor J. A. Ryle of Oxford University gave an address on 'Is Social Medicine a Reality? Experiments and Prospects.' The Vice-Chancellor was in the chair. Professor Ryle suggested that the physician must in future assume leadership on a larger scale in the social field. Such leadership did not necessarily imply political leadership. He put in a plea for considering social medicine as a discipline, just as clinical medicine was a discipline, and remedied his audience that during the last century medical improvement could be divided into two fairly clear periods. In the first period the great contribution had come from the physician-pathologists,
During retraining in injured, the used conditions opened. The to like of environmental on account of the health and security, including housing, nutrition, social insecurity and ignorance. Although during the period of the industrial revolution we had witnessed a greatly improved control of the infectious diseases we had simultaneously witnessed a rising incidence of chronic diseases connected with the stresses and strains of modern life; gastric and duodenal ulcer, chronic rheumatism, hypertensive psychocardiac and in one of these could a specific agent be defined. Yet it was scarcely to be denied that they too were in large measure preventable.

Prescot stressed the importance of vital statistics and social survey methods as main instruments of social medicine and referred to the value in teaching of the Registrar General’s decennial analyses. Slides were shown to illustrate the uses of these in class work when discussing the relationship of mortality to social class, occupation and housing. He then explained in some detail the launching of the experiment at Oxford and the form of teaching, which had been introduced by his statistical colleague Dr. W. T. Russell and himself, for students in the clinical period and gave an account of a socio-medical and anthropometric survey of the pre-school child which was to be conducted from the Institute of Social Medicine. He further mentioned the work of the Bureau of Health and Sickness Records, which was supported by the Nuffield Provincial Hospitals Trust and housed in the Institute under his direction. Relations with public bodies were important, particularly with the health authorities of the city and county; these were likely to prove of value in assisting the work of the Institute. In discussing the prospects of teaching and research in social medicine in this country the speaker suggested that other large university cities might well come to establish departments of social medicine and indicated that the work of the Government might very well in time be particularly directed towards local problems. The natural preoccupations of Manchester and Birmingham, for instance, would be industrial medicine. Cardiff might be the home of sociomedical problems in mining areas. Why should not Liverpool direct its attention to the very pressing problems of maritime hygiene? The health and sickness problems of the merchant seaman, at sea and ashore, and the poor hygiene of our ships, gave cause for grave concern. Ship owners, like the great industrialists, should be more familiar with human needs and with the contributions which medicine and hygiene and welfare services could now make to the improvement of living and working conditions and incidentally to efficiency and output.

NOTTINGHAM GROUP

At a meeting on March 16th Mr. S. A. S. Malkin opened a discussion on ‘Rehabilitation.” Before the war the word was used mainly to describe the process of retraining which was necessary when a man was severely injured and not return to his old work. During the war it had taken on another meaning. It is used to cover the whole process of treating a man who has been injured, beginning with the initial treatment and continuing until he is fit or has been retrained for new work. In the past, in the treatment of a man with a fracture, there has been concentration on the fracture itself, but now it is realized that if a man is to return to work or to his old occupation at all secondary factors which might cause delay must be eliminated. Essentials in a hospital rehabilitation service in contra-distinction to retraining (vocational training) are as follows: (1) Any anxieties or worries that he may have, and which are apt to delay his recovery by reducing his will to get well, should be eliminated by the help of the almoner who can act as an intermediary between him and his company and the compensation authorities, and who can, if necessary, help in dealing with any domestic difficulties that may have arisen. (2) His interest should be kept up by giving him occupational therapy, the facilities of a good library and encouragement in anything which will prevent him from stagnating. (4) Exercises which will keep the part of his body which has not to be immobilized on account of the injury as fit as possible, so that when he is able to get up this will not delay his progress. All these factors are very important and help to reduce the possibility of any injury may cause. Vocational training is required by some who are so injured that they cannot return to their pre-accident work. A scheme has been prepared which will be sponsored, but not under the Ministry of Labour, by the Wood Orthopaedic Hospital. It will be managed by an independent committee and will take patients from a large area and train them for suitable work. This scheme has the approval of the Ministry of Labour, which is prepared to send suitable cases to the centre when it is erected. Steps are now being taken to raise the necessary funds for this and it will be started as soon as they are available. This project will combine voluntary enterprise with government support and should be elastic and able to meet individual needs either of men or industries, so that they may be trained for and provided with the employment which they can undertake. Such a scheme should have a dual effect on heavy industries. It will help men to feel that if they are injured they will not be thrown on the scrap-heap and have to exist on compensation for the rest of their lives, but that they will have the chance to start new lives in which they will be self-supporting and independent of compensation.

The annual meeting of the group was held on April 20th, 1944, followed by a discussion on the whole paper on a national health service opened by Dr. J. C. Bridge. He said that many would feel a certain amount of disappointment that an industrial medical service was not included in the suggestions of the Government. The proposals for the national health service were apparently restricted to the establishment of a personal health service. It was stated in the white paper that the subject of health involved not only medical services but also the environmental factors which create conditions of health and prepare the ground for it. The proper continuance of the environmental and preventive services in school and industry might well be coupled with the habit of using for these services doctors who were also engaged in the personal health service. It was quite clear, therefore, that services other than those relating to personal health, including industrial health, had not been lost sight of, and the linking up of these with the personal health service was contemplated. It was not claimed in the white paper that the proposals constituted a comprehensive medical service. The Ministry of Labour, however, had compulsory powers to appoint the industrial medical officers and these powers would probably need after the war the pre-accident work. Prior to the war, generally speaking, the only doctors supervising industry were the Medical Inspectors
of the Factory Department and the Examining Surgeons. It was possible that part of the medical service in industry would be effected through the Examining Surgeon, but there was no reason why the general practitioner or the medical officer in charge of a health centre should be excluded. Dr. Knox pointed out that in taking his share of the work. On the other hand, so far as the white paper was concerned, there was nothing to prevent the establishment of an industrial health service as distinct from a personal health service, nor was it necessarily to be supposed that such a service would be under the direction of the authority responsible for the administration of the latter.

In the discussion which followed, Dr. Knox asked whether the Examining Surgeon doing industrial work would be paid by the government or by the employer. Dr. H. A. Summers pointed out that the Factory Examining Surgeons were all general practitioners and in many cases had not experience of factory conditions but had to adjudicate for workmen's compensation. He did not like the idea of one whole time industrial medical officer dealing with several firms. He thought that each organization, if it were not large enough to justify a full-time medical officer, should have its own part-time medical officer. Dr. G. E. Collis felt that doctors connected with the insurance funds were available. Firstly the Medical Inspectorate of the Factory Department of the Ministry of Labour who should maintain close contact with their non-medical colleagues such as chemists and engineers. Secondly the full-time medical officer of whom there were two classes, the first connected with large industries without any special hazards, and the second engaged in industries which were not necessarily large units but associated with a special hazard. In both of these groups the medical officer was to be regarded as a specialist. The third group of medical officers in industry and much the largest was that comprising those organizations having no special hazard and not employing unduly large numbers, in which a specialist industrial medical officer was not required, and for which the part-time medical officer was sufficient. He was of the opinion that payment of the industrial medical officer by the employer was entirely satisfactory and that those who felt anxiety over the possibility of a medical service in industry being discontinued for financial reasons had no grounds for their fears. Once a medical service had been established the employer found that it paid him to continue it. Dr. Collis hoped to work from the health centre in future and felt that this had great advantages in that it enabled contact to be maintained with colleagues. The full-time industrial medical officer had the disadvantage of being out of touch. Dr. Collis took a very different view of some of his patients since he had been a part-time medical officer. Dr. T. A. Lloyd Davies said that the relatively few members of the Factory which the part-time medical officers might be regarded as the ‘specialists’ of industrial medicine, and part-time medical officers as the ‘general practitioners’; but it was important that there should be one service, and the work of the factory medical officer should be extended to include that of the Examining Surgeon and the narrow restrictions now placed on Examining Surgeons should be removed so that they might be more approximate to factory medical officers. Dr. Whinnett thought that the existing officer of Examining Surgeon might well be replaced by the part-time medical officer. Apart from the presence of special hazards he considered that the part-time medical officer was fully able to meet the needs of the situation. Dr. N. L. Lloyd was on the whole against the idea of the part-time medical officer. He thought that so far as large towns were concerned, it would be better to divide the work between whole-time men rather than great numbers of part-time medical officers.

Dr. Bridge then put two questions to the meeting. Was it agreed that an industrial medical service was required? If so, should the industrial medical service be considered as an element in the scheme of future comprehensive medical service? The first question was answered in the affirmative and the second in the negative, both by an unanimous vote.

The next meeting took the form of a visit to Kirkby Colliery. Members attended in two groups, one on May 24th and the other on May 25th. None of them had ever been underground before and the visit impressed them with the importance of medical supervision in the coal-mining industry. The stringent precautions taken to prevent accidents were such that a marked impression was made, one which was not likely to be forgotten.

The twelfth meeting took place on August 24th, and consisted of a demonstration by Mr. A. H. Walters of treatment methods in use at the Casualty Department of the Royal Albert Dock Hospital, London. Mr. Walters first described the protection of dressings. Sepsis sometimes arose because of constant penetration of oil and grease through dressings. Wounds can be closed by the application of a solid material such as plaster of paris or a dressing such as Vizad over the dressings during work. Plaster of paris cots can well remain on for several days, provided primary treatment is adequate. Disadvantages are: liability to become bloodstained from the inside, and dirty, wet, or oiled from the outside. Generally speaking, heavy workers prefer plaster cots, especially for the first week; and lighter workers ordinary dressings protected by Vizad, during working hours.

Three main points in the treatment of finger injuries are: early treatment to avoid sepsis; keep the part protected and dry; a streamlined dressing to permit rhythmic hand and finger function. Chemical methods can combat sepsis. Protection, and keeping a dressing dry, is often difficult. Vizad is an adhesive viscose film 0-003 mm. thick, specially treated for fluid resistance. It can be easily wiped clean and is without bulk or weight. In Mr. Walters' experience over 80 per cent. of accidents to manual workers involve fingers. Injuries include: superficial lacerations requiring first-aid treatment; deeper lacerations with or without crushing, requiring works surgery treatment; crushes without laceration or fracture, and minor slipping with removal of some tissue also requiring treatment at the works surgery; and with compound injuries, requiring hospital treatment. First-aid measures include the application of 2 per cent. brilliant green with spirit, and protection at work. Deeper lacerations can be treated with 1 per cent. tincture of iodine and full-thickness sulphate solution, or thiazamide powder (M. & B. 760). More serious finger injuries can be treated at the works surgery by immediate immersion in tepid 1 in 1000 buffered profavine sulphate solution for 15 minutes; minimum debridement; examination for tendon injury; removal of foreign bodies; laceration repair by closely placed horsehair or plastic sutures; removal of pain due to bleeding under nail by trephine. Before sending cases of fracture and severe injury to hospital, these simple measures can be carried out. During this time the patient can be treated for shock.

After the meeting Dr. Lloyd Davies showed cases of dermatitis treated by prolonged soaking in 1 in 1000 potassium permanganate solution, followed by 90 per cent. alcohol, the application of lot. calamin, and an open wove gauze dressing applied to the affected part by stitching the edges together over it.