

Proceedings of the Scientific Meeting of the International Medical Society of Paraplegia in Jerusalem on 6 November 1968 at Hadassah Medical Centre.

PART I

MORNING SESSION

Opening by the President,

Sir LUDWIG GUTTMANN, C.B.E., M.D., F.R.C.P., F.R.C.S.

Sir Ludwig Guttmann (G.B.). I have great pleasure in opening the 1968 Annual Scientific Meeting of the International Medical Society of Paraplegia and I welcome you most warmly on this special occasion of holding our Annual Meeting in the Holy City of Jerusalem. On behalf of all of you, I express our thanks to the authorities of the Hadassah Organisation and in particular to the Hadassah Medical Centre for offering us their kind hospitality, which we very much appreciate.

I should like to welcome especially Mr. Kollek, the Mayor of Jerusalem. He is the man who, at the moment, has the great task of bringing peace to this city, and I am sure he is the man to do it. I greet you, Mr. Mayor, most warmly for having honoured us with your presence.

I also wish to welcome Dr. Brachot, the representative of the Ministry of Health, and I am very glad that the Ministry of Health is taking interest in our specialty. Furthermore, I should like to welcome Dr. Lotan as the representative from the Ministry of Labour. The Ministry of Health and the Ministry of Labour are, of course, two Ministries which are very closely connected with the medical and social problems of paraplegia.

I know that here in Israel you are doing a marvellous job for the medical rehabilitation not only of war veterans, whom I had the honour of meeting in 1949 when the Israeli Government asked me to come to Tel Hashomer to help in their treatment and who became the pioneers in sport in Israel for the paralysed, but also for the new immigrants who come to Israel from all over the world. The Ministry of Labour, in particular, has the great responsibility for the social re-integration of paralysed people and other severely disabled people into society. I know that this is a difficult task, from experience in Great Britain. Although, in 1944, the British Ministry of Labour was very apprehensive about employing paraplegics, today it is the most enthusiastic Government department in Great Britain for the employment of paralysed people. They have realised that paralysed people are not cripples but wheelchair-bound workers, as so many able-bodied people are chair-bound for most of their working hours. After the 1964 Stoke Mandeville Games in Tokyo, the Japanese Government, having seen through the Games what paralysed people can do, set up, within six months, a factory for paralysed and other severely disabled people. They now have three factories in Japan run on business lines and they are doing extremely well. So, I am very glad indeed to see a representative of the Ministry of Labour here with us.

I also welcome Professor Mann, the Medical Director of Hadassah Medical Centre, whom I have known for many years. Actually, he worked in Great Britain when I started my spinal unit and he was one of the first visitors to Stoke Mandeville, and I went later to his spinal unit at the National Orthopaedic Hospital, Stanmore, in London, to advise just before he left for Israel. He is, as Director of the Hadassah Medical Centre, mainly responsible, of course, for the development of this fine Medical Centre. I thank him for the hospitality to our Society.

Lastly, but by no means least, I should like to introduce to you my friend, Professor Emil Adler. I have known Professor Adler since 1927—quite a long time—and ever since we have been close friends. He came to Breslau as a young post-graduate student and I taught him something about peripheral nerve pathophysiology and he has never forgotten it. . . . I hope! He will take the chair for the morning session.

Now, ladies and gentlemen, I believe the Mayor of Jerusalem wants to say a few words.

Mr. Teddy Kollek, Mayor of Jerusalem. Let me say, first of all, that we are very happy to have you here in Jerusalem for this session and also for having brought the Games to this country. I understand that there is a complaint that some of your members are going sight-seeing instead of participating in the sessions. If you do this to us, although this is a compliment to the beauty of the city, you will make propaganda against scientific congresses coming to Jerusalem. I must, therefore, say you should be more faithful to your programme!

In a more serious vein, I wish I could be quite as optimistic as Sir Ludwig about what we are doing in Jerusalem. I think we are on the right way and that we have made some progress in this last year and a half towards the two types of people living together. You have been here in these past few days during days of the greatest tension we have experienced since the war, but if you compare this with the tension in cities from which some of you come, perhaps it doesn't look too terrible to you. When we had an incident the other day—some bombs were thrown and there was a small clash—and the world papers carried big headlines, we found afterwards (having investigated the matter very thoroughly) that no knife had been used, no pistol had been used, nobody had been killed, there was no arson, there was no pilfering, no robbery, and the entire damage amounted to £3000 (sterling)—about six to seven thousand dollars. I could mention quite a number of cities where, if this would have happened, it wouldn't have made the headlines of the newspapers. However, this is a long-drawn-out process, and since, generally, city problems can never be solved anywhere within one or two administrative periods of four or five years, this will also take a generation or two here and it will depend on what happens in the Middle East as a whole. Meanwhile, we have tremendous problems on our hands. The Jewish part is an immigrant city—more than half of the people living here are what we call 'recent immigrants', people who came in since the State of Israel was established during the last twenty years. The vast majority come from Arab-speaking countries, without skills, without means. You have great contrasts in the city: on the one hand, the greatest number of academically trained in Israel, and on the other the highest percentage of illiteracy—people who come from as far different places as the Atlas Mountains or Rumania, where, until recently, a certain generation wasn't

allowed to go to school because Jews were not allowed to go to school. Therefore, these people came here illiterate. We have here double the rate of child birth than in Tel-Aviv or Haifa and we also have the largest number of old people because many of the elderly who came to this country didn't feel that they had arrived unless they actually came to Jerusalem, for which they had prayed all their lives. So, among all these problems we have now the added problem of 70,000 Arabs in the city who come from a society which had provided very few social services and which raised hardly any taxes, whom we have to try to bring up to the same level as ours over a period of time without interfering too much in their cultural and social patterns, which, again, is a difficult thing.

With all this, I believe that we have one of the most beautiful cities in the world which I hope you will enjoy. I believe that all people living here—Jews, Gentiles and Arabs who are at home here—love the city and I hope that this particular attachment will be one element which will help us to overcome many of the difficulties that exist. I'm sure we'll have our ups-and-downs but I'm sure that eventually, within some period of time—it took two hundred years in New York but I hope it will take a little less here—we'll solve our problems. I believe we are on the right road. I thank you again for coming here and I wish you a very good Congress.

Sir Ludwig Guttman. The Mayor, Mr. Kollek, has given us an interesting survey, and we are very grateful to him for the work he and his colleagues are doing here. You will agree with me that he and his staff are really rehabilitationists in the best sense of the word. They have to rehabilitate not only physically handicapped but a whole community of people who have come from all over the world, and that is, of course, quite a gigantic task! You will see, and many of you have already seen, what has been accomplished here and this deserves the full measure of admiration we can give them.

Now, may I ask Dr. Lotan, the representative of the Ministry of Labour, to say a few words?

Dr. Lotan. I consider it a great honour and privilege to have this opportunity of addressing you on behalf of the Ministry of Labour and our National Insurance Institute. Our National Insurance Institute administers, *inter alia*, also Workers' Compensation—and this is a field where we meet this problem with the paraplegics. I'm happy to say that their number as a result of work accidents is small, but their number has increased as a result of road accidents, which sometimes are considered, according to the law, also as work accidents. As you know, we have quite a number of paraplegics as a result of the war and the 'peace' after the war. So, needless to say, we are highly interested in the outcome of this Scientific Meeting and we hope very much that you will be able to make again a contribution towards alleviating the suffering of the people who have this very severe disability. According to the slogan of the Gerontological Society, you will help them not only to add years to their life but also to add life to their years. We know very well that it is not sufficient to save life: it is necessary to give, as far as possible, content to life. When I saw the day before yesterday the wheelchair parade, I was very much impressed—and I think we all were—by this sight of people who are suffering and yet who have overcome their limitations to a certain degree.

We hope very much that you are only at the beginning of the road in regard

to changing the way of life of the paraplegics and we promise that we who are concerned with social services and social security will be very glad to do our part in this respect.

So, let me wish you the best of success in your deliberations and say that all of us have great hopes of scientific progress in this field. Thank you very much.

Sir Ludwig Guttmann. Thank you, Dr. Lotan. May I now ask Dr. Brachot to speak on behalf of the Ministry of Health?

Dr. Brachot. It is a pleasure and an honour to welcome you to our country for your annual scientific meeting. I do not believe very much in many and long preliminary greetings. This always reminds me of an old teacher of mine who was a bachelor and he confided to us one day: 'Well, I should like to be married, but to go through all the preliminaries—No!'

So, I should like to convey to you the greetings of the Minister himself and of our staff and wish you a very successful congress here. Professor Adler has asked me to speak to you as the acting head of the Ministry, but, actually, I'm very much involved in the problem itself, as I am a Public Health man. When teaching students, I very often face the problem of how to get across the idea of rehabilitation in such a way that it doesn't only sound like beautiful phrases discussing 'physical, mental and social rehabilitation'. At a time when beautiful phrases are widely used and where there is an enormous discrepancy between those beautiful phrases and the deeds, I have always found it extremely helpful to point to one great achievement in the field of rehabilitation which shows what can be done. On these occasions, I have usually quoted the Stoke Mandeville Games as one example, where a whole group of problematic people, because of their profound physical impairment, have been brought to a situation where it could be demonstrated that physical, emotional and social rehabilitation is really possible on a large scale if there is a moving spirit behind it, if there is a will behind it and if there is understanding of society and of doctors behind it. On such occasions, I have always had to mention Sir Ludwig as that moving spirit behind this great achievement in the field of rehabilitation in our time.

Therefore, I feel that this tribute to Sir Ludwig is being made at the right moment and in the right place, and I would like to tell him how much we in Israel appreciate him. Those of us who have seen the problem of paraplegia in the British Army, in our War of Independence, in our war of 1956, and now in the Six Day War, want to say how grateful we are that in this country, through your personal influence and that of your pupils, we have been able to do, perhaps not all that is necessary, but at least to be on the right road for dealing with the problem.

So, I wish all of you a very successful Congress and a very enjoyable stay in this country. Thank you very much.

Sir Ludwig Guttmann. Thank you very much, Dr. Brachot, for your kind words. I now have great pleasure in asking Professor Emil Adler to do us the honour of taking the Chair for this morning's session. Professor Adler is the Professor of Physical Medicine at Hadassah University and has been doing very great work here for many years in propagating the idea of rehabilitation, not only from the physical point of view but also from the psychological point of view. As

I have already mentioned, I have known Dr. Adler for many years and I have followed his progress with the greatest interest and greatest joy.

Chairman, Professor Emil Adler. We have a very tight schedule, but before we start with the lectures I have a few remarks to make. First of all, I have to thank Sir Ludwig for his very kind words in introducing me. I don't know whether I merit such praise. I am not going to repeat again what we feel with regard to Dr. Ludwig Guttmann and what I have felt for many, many years.

Secondly, I have been asked to say a few words on behalf of the Medical School and the Medical Faculty. Unfortunately, a very short time ago, our Dean, Professor Halperin, who would have been greatly interested in this Meeting, passed away. He was one of our best friends and one of the most important personalities in Neurology in this country—and not only in this country—and we are at present orphans as far as the Deanship goes. I have been asked on behalf of the Medical School to greet this Meeting and to wish it complete success.

Our first subject is Deformity of the Spine and we have five speakers on this subject in the morning session. The first is Mr. McSweeney from Great Britain, a well-known orthopaedic surgeon in Great Britain. I don't think he requires very much introduction, as most of the people here know him very well, and I should like him to take the floor.

SPINAL DEFORMITY AFTER SPINAL CORD INJURY

By T. MCSWEENEY, M.Ch.(N.U.I.), M.Ch.(Orth.), F.R.C.S.(England)

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INTRODUCTION

THE return of tone in the spinal muscles after spinal cord injury is such that gross deformity of the spinal column in properly treated adult patients is unusual. In children there may be little or no alteration in spinal alignment in the early months after injury; as the child grows minor asymmetry of muscle balance may lead to progressive deformity. The principle of homeostasis, whereby the damaged spinal cord maintains near normal spinal alignment, is conditioned by the recovery of tone in the spinal muscles, which in turn depends on the proper early and continued management of the patient. The time is long since past when complete lesions were associated with the notion of paraplegia-in-flexion; its avoidance depends on the proper posturing of the patient, early passive exercises, the treatment of sepsis, and many other details of management which require no further emphasis here. As Guttmann (1952) pointed out in his Wartenberg lecture—'The conception that paraplegia-in-flexion is pathognomonic of complete transection, while paraplegia-in-extension is pathognomonic of incomplete lesions of the spinal cord, is no longer valid in its dogmatic form'.