Manipulative Therapy in the European Theatre of Operations*

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The record of the progress of manipulative therapy is open for all to read. However, the fact that this record has been published chiefly in The Journal of the American Osteopathic Association has had the effect of by-passing the largest group of physicians, namely, those who practice medicine. This has been a dominant factor in their misunderstanding concerning the proper use of manipulative therapy, and thereby, its normal application has been seriously limited. Although distribution may still be confined largely to the osteopathic profession it is important to record the facts relative to the use of manipulative therapy by myself and associates in the U.S. Army Medical Corps.

I went to England on the Queen Elizabeth, in April, 1943, a first lieutenant in the Medical Corps, attached as Senior Surgeon to the 5th Air Depot Group, Army Air Forces, which became part of the 8th Air Force upon reaching England.

We were located at little Stoughton, an army air base near Bedford, and we joined the 5th Air Depot Group on our arrival and used the same medical facilities, which consisted of a twenty-bed infirmary, pharmacy, laboratory, and dispensaries.

Sick call was held by all medical officers. Many patients with problem back disorders were examined in consultation and manipulated without anesthesia. The technic was explained and the doctors present exhibited intense interest in the patients’ comfort after treatment. This program resulted in the use of cautious manipulation on the next suitable case seen by these doctors, and, I am pleased to report, with good result.

Fresh para-vertebral sprains were a daily occurrence. They usually required only one manipulative treatment, with immediate return to full duty. This was quite a contrast to usual practice which consisted of strapping, infra-red therapy when available, bed rest for several days, with eventual return to light duty for several more days, during which the patient turned up at sick call each day complaining of his aching back.

Two months after landing in England, I received a letter concerning the project, “Manipulative Therapy Experiment.” The letter was from the second in command in the European Theatre, Lt. General John C. H. Lee, who asked if I would be interested in the manipulative treatment of exhausted fliers. My reply resulted in a request that I come to London for a conference on the problem. Accordingly, orders were cut at my own headquarters so that I could proceed to the Commanding General’s office which was located at Grosvenor Square adjacent to the United States Embassy.

I had heard that General Lee was a soldier 24 hours a day, not only exacting, efficient, self-disciplined, and equally firm with his troops, but I was soon able to vouch for the veracity of these opinions, but I feel that the greatest factor in his successful command was his intense idealism which was so contagious that it spread to the ranks. His graciousness was well demonstrated to me, even in the long hours of each day.

“Doctor.” Incidentally, I heard Major General Paul Hawley, at a recent Industrial Surgeons’ Conference, say that he too appreciated being called “Doctor.” General Hawley made arrangements with General Hawley for a conference on manipulative therapy, at which time General Hawley asked me to conduct a manipulative therapy experiment at a Convalescent Hospital. He wanted me to demonstrate the effectiveness of manipulative therapy in skeletal back disease, so that my own capability would be used, he felt that the Army should use only methods of therapy that had been proved effective.

Two weeks later my orders of transfer came through from 8th Air Force Headquarters to the Chief Surgeon Office, Services of Supply, where I was assigned temporarily as Medical Aide to the Deputy Field Commander, Major General W. G. Weaver, to accompany his field inspection team in a survey of the entire Services of Supply troops in England, Scotland, and Northern Ireland.

While on this trip we inspected the 16th Station Hospital, Bromsgrove, where I was to originate the Manipulative Therapy Experiment at a later date. I was most interested to find that there was also conducted here the officers’ convalescent hospital experiment which served as a pilot model for future convalescent hospitals. The commander, Major Frank Stinchfield, M.C., later promoted to Colonel, was one of the most progressive orthopedic surgeons in the Theatre, and had been selected to work out the “bugs” in a reconditioning program which was opposed in principle by some doctors who still felt that complete rest was desirable in all conditions and that active exercise would be harmful.

Colonel Stinchfield’s excellent results were the basis for a program which saved many hospital beds and resulted in a much better record of return to duty. I emphasize this achievement because I feel that it was one of the major medical advances of World War II.

Fortunately, it was in a completely orthodox orthopedic atmosphere in which the manipulative therapy research was begun, and this influenced my plans until the end of the European phase of the war, when the entire Hospital was shipped home to the United States. Manipulative Therapy Experiment became the stepchild of Colonel Rex L. Dively since he was then the chief orthopedic consultant, FTO, and I attempted to work with him. I realized only too well the eminent professional danger of being way out on an experimental manipulative limb of an orthodox orthopedic tree. It was obvious that the final analysis of the curative value of this therapy might well have an effect on its future use in the Army, in the Veterans Administration, and in general medicine. A failure would result in the Army placing the experiment and preconceived idea, "Oh yes, we tried manipulative therapy in skeletal back disease and not a single back was helped."

While I knew the effectiveness of this therapy, none of my orthopedic friends were enthusiastic; one visiting colonel stating that he manipulated thirty-five backs the week before and none of them were sick with increasing disability. Another orthopedic surgeon
who attended our manipulative training course asked if he could bring a “ring” whom he had made worse by manipulation under anesthesia; the acting back still ached. I assured the orthopedist that it would be an excellent plan to add this back to the long string of problems back on the same side which had been seen over the years. The patient came to our clinic and I asked the orthopedist to show me his method of manipulation. He very cautiously demonstrated flexion, extension, and sidebending of the lumbar spine, which was quite limited by muscle spasm and hypomobility. Then I asked the orthopedist to do a careful anterior torsion of the right lumbar spine, which he accomplished with good completion of facet motion of the patient was asked to stand up, and when he did so, he voluntarily tested the motion of his lower back, turned to his doctor and said, “Major, why didn’t you do this before? See, I can bend my back now.” The orthopedist was impressed more by this experience than he could have been by anything else.

I had explained to General Hawley at our first conference that I considered fresh paravertebral sprains to be most suitable for manipulation; therefore, you can appreciate my amazement when the chief orthopedist at the 10th Station Hospital started to select for me patients with chronic back disorders which he assumed we were hopeless. Later, all patients with back disorders sent to the hospital were under my care, and all fresh sprains incurred at the hospital were allocated to me for treatment.

Each week end I held a manipulative clinic at the Headquarters, Services of Supply, located in London and Cheleenham, where many of the Officers of Service and their assistants as well as many Line Officers, including the late General Patton, were patients. On several occasions I was requested to see patients with back disorders at the headquarters of a large U.S. Army hospital.

July 12, 1944, our section, with the rest of the 301st Hospital, was asked to submit a report of the department, which is recorded here in complete form:

HISTORICAL DATA REGARDING MANIPULATIVE THERAPY

In September, 1940, at the request of the Chief Surgeon, ETOUSA, an experiment in manipulative therapy was instituted to evaluate the advantages in forward passive motion of spinal joints in cases of acute and chronic strains, with special emphasis on low back conditions. The experiment was started by Captain Francis E. LeBaron, M.C., and one ED as clerk. Over the course of the experiment, some were added to the experimental staff, which facilitated note-taking and general upkeep of the department.

A report on the first series of 30 cases, all receiving manipulative therapy, recommended dispositions: 49% were returned to full field duty, 34% were sent to restricted duty, and 16% were returned to general hospitals. A check on the final dispositions of this series made at the replacement depot showed 50% were sent to full field duty, 38% returned to active duty and 30% returned to general hospitals.

The second phase of the experiment consisted of 200 cases, 100 being treated with manipulative therapy plus the regular rehabilitation program, and 100 being treated as controls, receiving only the regular rehabilitation program. Of the 100 cases treated with manipulative therapy, 59 were recommended for full field duty, 20 for restricted duty, and 15 were returned to general hospitals. Figures obtained on these cases from the replacement depot showed that 70 had been returned to full field duty, 19 were restricted duty, and 12 to general hospitals.

In the control group, 90 were recommended for full field duty, 52 for restricted duty, and 19 were returned to general hospitals. Replacement data showed that 25% of the cases who had been to full field duty, 30% to restricted duty, and 19 to general hospitals.

After both these phases were completed, a conference was held with the other physical therapists at the 301st Hospital. The conference was held at the 30th Station Hospital, at which time it was decided that manipulative therapy would be used in the treatment of back strains and sprains.

In order to expand this type of therapy, it was agreed that Osteopathic Physicians and Orthopedic Surgeons should be trained to handle back cases. Up to the present date, there have been six (6) Orthopedists and five (5) Osteopathic Physicians who have attended this clinic for the purpose of obtaining the work, and becoming familiar with the special techniques of manipulative therapy.

During the past two (2) months, four hundred forty (440) cases have been treated, three hundred forty (340) with the use of manipulative therapy as an adjunct, with a total of approximately two thousand (2000) manipulations all having been accomplished without the use of anesthesia. Benefit was demonstrated in approximately eighty percent (80%) of the cases receiving manipulation.

Many accessory reports were made to the Chief Surgeon relative to:

The inadeasibility of giving manipulative therapy training to qualified orthopaedic physicians and orthopedists simultaneously.

The training at our clinic of qualified orthopaedic physicians.

Preliminary report of statistics of Manipulative Therapy Experiment at the 307th Station Hospital.

Preliminary report of number of rehabilitation days of patients involved in the Manipulative Therapy Experiment.

Final statistical report on cases of back disease.

Manipulative therapy training program of orthopaedics and orthopaedic physicians.

Common errors in the care of low-back strain and spine.

Report to the CG, SOS, Manipulative Therapy Progress.

Report on acute paravertebral sprains.

Early treatment of back sprains, mild or moderately severe, acute.

Organizational chart, 301st Station Hospital.

Composition of orthopaedic assistants.

Manipulative Therapy Clinic Symposia.

Brief summary of clinical services.

Letter from General Hawley which disapproved my request to discontinue the training of orthopaedic and orthopaedic physicians.

Letter from the Office of the Surgeon General relative to publication.

Our clinic held frequent problem case and teaching sessions, and the best paper was given by T.S. Richard C. Shannon, who was an assistant orthopaedic physician.

On April 7, 1946, I sent a report to the Chief Surgeon which is of such importance that it is recorded below:

BRIEF SUMMARY OF CLINICAL SERVICES

1. The manipulative therapy clinic was established at this hospital, September 1945.
MANIPULATIVE THERAPY IN THE ETO—LeBARON

2. The chief function of this clinic has been the care of low-back disability.

3. Finds:
   a. 50 cases—regular rehabilitation plus manipulative therapy*
   b. 200 cases
      (1) 100 cases—regular rehabilitation (control group)
      (2) 100 cases—regular rehabilitation plus manipulative therapy
   c. 627 cases—regular rehabilitation plus manipulative therapy, which were one half of the total low-back cases at this hospital during the period, April, 1944, to April, 1945. The other half was a control group under the care of the orthopedic back clinic. Recommended disposition in the manipulative series was:
      (1) Full duty—58.1%
      (2) Restricted duty—33.0%
      (3) Return to hospital—0.9% (mainly for psychiatric observation)

Note: An additional 74 cases were local out-patient and consultation requests, and were recommended for return to full duty.

4. 643 manipulative treatments have been given, with notable benefit in all cases in which motion was desirable but was restricted (approximately 75% of the cases in the total series). Manipulative treatment has not been used in those cases in which it was contraindicated, and there have been no bad results from its use.

5. Capt. E. E. Walther has served very capably as chief of the clinic during my absence, with Lt. C. M. Money as his assistant. A medical officer was assigned the duty of making final dispositions at such times.

FREDDY E. LeBARON
Captain, Medical Corps
Chief of Manipulative Therapy Clinic

It should be noted that there was approximately a 20 per cent better disposition in those cases which were manipulated than in the control group which was not so treated.

Major General Paul Hawley, in a letter** to me dated April 13, 1945, stated, "After the experience of the past months, I am convinced of one thing: the only method of approach is through the medium of equally trained men in both professions. I think that the purpose is defeated by having men in one profession in close association with men in the other profession who are not equally well trained. It is too much to expect a man of the highest degree of training—in either profession—to accept as fact something that is offered by a man whom he knows to have had much less training and experience. This is a rather normal human reaction which, I think, we must accept."

This view is also my own. M.D. education must include skeletal diagnosis and specific manipulative therapy for complete medical service.

*Complete statistical data has been reported to the Chief Surgeon previously.

REFERENCES
1. Letter from General Lee, 30 June 1944, relative to the use of osteopathy in rehabilitation exercises.
2. Letter from General Lee, 2 July 1944, an affirmation to do research as requested.
3. Letter from General Lee, 9 July 1943, requesting me to come to London.
4. Report on installations in Western Base Section, 21 August 1943.
6. Historical data regarding manipulative therapy.
7. The inadmissibility of giving manipulative training to qualified osteopathic physicians and chiropractors simultaneously, 28 June 1944.
8. The training of our clinic of qualified osteopathic physicians in the ETO.
9. The training and appointment of qualified osteopathic physicians in the ETO.
10. Report on statistics of Manipulative Therapy Experiments at the 30th Station Hospital, 8 Jan., 1944.
12. Preliminary report on number of rehabilitations days of patients included in the Manipulative Therapy Experiments, 12 Jan., 1944.
13. Final statistical report on 250 cases of skeletal back disease, 26 July 1944.
14. Manipulative therapy training program of osteopaths and osteopathic physicians, 6 July 1944.
15. Cases in the care of low-back sprains and strains, March 1942.
16. Report to the CG, SOS, Manipulative Therapy Program, 1 April 1944.
18. Early treatment of back sprains, mild or moderately severe, acute, 1 Feb., 1945.
19. Uniform chart, 30th Station Hospital.
20. Consultation of officer instructee, 7 April 1945.
23. Letter from General Hawley which disapproves my request to discontinue the training of osteopaths and osteopathic physicians simultaneously, 5 July 1944.
25. Letter from General Hawley relative to his observations regarding manipulative therapy, 13 April 1945.
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- "Oral polymeric N-acetyl-glucosamine and arthritis"
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