THE PRESENT ATTITUDE TOWARDS BONE-SETTING AND MANIPULATION.*

BY

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THAT wonderful medium of advertisement, the press, is responsible to a greater degree than is any other single factor for the atmosphere of mystery which, even to-day, surrounds bone-setters and other manipulators.

Reports of sensational recoveries after treatment by some unqualified practitioner are not infrequent, and reference is often made to the fact that treatment by qualified practitioners, either in private or at a hospital, has been unsuccessful. At the present time at Gallspach in Austria an unqualified man, formerly a blacksmith, is carrying on an extensive practice, describing himself as a "wizard." This person claims to have cured, of all manner of diseases, 250,000 persons from twenty-two different countries. His method consists of holding towards the patient a glass wand filled with helium vapour and attached to a high-frequency apparatus. With this he professes to be able to diagnose and to treat any complaint. He is visited by 140,000 people annually, and is estimated to be making £500 a day. The Austrian Government has reported favourably on the Gallspach institution, and is believed to be encouraging it on account of its profitable nature. According to the *Times* of February 25th, a medical commission from Berlin and Vienna has visited Gallspach, and has not hesitated to describe the "wizard" as a charlatan who is collecting a large number of hysterical people about him. The commission draws special attention to a number of cases of malignant disease in which the opportunity for hopeful surgical intervention has been lost while the patients were under the so-called treatment of the "wizard." A desire for something unorthodox in treatment is inherent in a very large proportion of the human race, and is responsible for the crowds which visit Gallspach. The same idea is present in the minds of many who visit a bone-setter. If he should succeed by his treatment the result is noised abroad, and is quite likely to find its way into the lay press.

If the bone-setter does not produce a good effect nothing more is heard of the matter, and the patient seeks treatment from an orthodox practitioner, who, if he is successful, has only done what was expected of him, and therefore has not merited any particular comment. Why are the successes of the qualified not reported in the press? The answer to this question is simply that our profession does not permit advertisement. A few weeks ago the entire half-back line of one of our first division Association football teams was made up of men upon whom I had operated for joint disability. I am quite sure that had I been a certain well-known bone-setter this coincidence would have been widely mentioned in the lay press, probably with my photograph attached. As it was it, quite rightly, passed unnoticed. No doubt the methods of the bone-setter of to-day are in no way different from those of past years. The same diagnosis of a "bone out of place" is made with monotonous regularity. During the past month I examined a mechanic who complained of pain in his back following a sprain. His radiograms showed a perfect set of vertebrae and pelvis. He was advised by a friend to see a bone-setter, who told him that he could feel a bone out of place in the spine. The man replied that he had been radiographed at hospital and told that his bones were normal. This left the expert quite unabashed, and he solemnly replied that a radiogram would not show the small amount of displacement which was present, but that his skilled fingers could feel it.

As thinking men, we must ask ourselves, first, have these unqualified workers any secrets of diagnosis and treatment which are not available to those more scientifically trained? Secondly, do we as a profession study manipulative methods closely and employ them to their best advantage?

We all agree that a correct diagnosis must precede accurate treatment. Those who work especially among injuries and diseases of bones and joints come across the tracks of the unqualified and see their failures as well as their successes. I have had a recent experience which is similar to one recorded at a discussion on this subject in 1926 by one of my fellow members of the British Orthopaedic Association.

At the Royal Manchester Children's Hospital last year I saw a child who had been taken to see a bone-setter because of a limp. After several months of treatment the child was brought to hospital, where it was found to have a congenital dislocation of the hip. This case teaches another lesson besides the need for skill in diagnosis. Here is a case where the qualified practitioner adopts manipulative treatment and reduces the dislocation. So far as I know, the bone-setters and osteopaths have never successfully reduced a congenital dislocation of the hip—a condition which requires more manipulative skill than any other disability.

However that may be, if there were not cases where benefit has resulted from the manipulative treatment of the bone-setter he would cease to exist, and it is for us to sift his methods and winnow the grain from the chaff. In our medical schools the dangers of moving joints, which may be the seat of tubercle or other inflammatory processes, are always emphasized, but I am sure that the benefits which may be derived from the proper manipulation of other joints, as well as the correct manner of performing those manipulations, are insufficiently taught. We must therefore study the conditions and decide which joints are suitable for this form of treatment. So long ago as 1867 Sir James Paget delivered a lecture on "Cases that bone-setters cure," and, in the selection of cases, he laid emphasis on the temperature of the joint as a guide, insisting that no joint with a raised temperature should be moved. In 1871 Wharton Hood described the technique of Hutton, a well-known bone-setter; and in 1882, in the *Lancet*, Dr. Fox described the methods of Taylor, another bone-setter, whose work he had watched, and, as a result, advised forced and sudden movements for the breaking down of adhesions, especially in joints stiff from prolonged fixation. We are all fully aware of the danger of movement in quiescent tuberculous joints, and most bone-setters to-day fight shy of any doubtful joint. If a joint is inflamed, the muscles controlling it become spasmodically contracted and movement is not permitted in any direction. The clear indication is rest for the joint until the inflammation has subsided.

Technique of Manipulative Surgery.

Forceful movement should always be carried out under full anaesthesia. It should cover the complete range of the joint in every direction, and should be performed by steadily increasing pressure, which stretches and then breaks through the adhesions. The grip should be made close to the joint so as to avoid the dangers of long leverage.

Following such manipulation the patient may suffer considerable pain for some hours, and I know of nothing more comforting during this period than the application of local warmth by a rubber hot-water bottle. After the expiration of the first hour or two, gentle stroking massage is soothing, and may be followed later, when the patient will tolerate it, by deeper massage. It is unusual to find that after manipulation the patient can permit a full range of movement at once, without pain, but this does sometimes happen after the rupture of a single adhesion.

Daily massage and exercises are necessary in the after-treatment, and the use of a simple apparatus with a weight and pulley should be commenced as soon as possible. I propose now to go into more detail in regard to individual joints.

Shoulder-joint.—In the manipulation of the shoulder the first essential is an assistant strong enough to control the scapula, by no means an easy matter. He must place his arms round the patient and hold the axillary border of the scapula firmly so that all movements shall take place at the gleno-humeral joint. The humerus is held by the operator at the junction of its upper and middle thirds, his free hand pressing on the acromion. The arm is now

*An address to the Rochdale Division of the British Medical Association, March, 1930.

firmly but slowly abducted to the full extent. Rotation inwards and outwards must be done, followed by circumduction, and, lastly, the arm is carried back with the shoulder abducted. The scapula is now allowed to move freely with the arm through a full range.

Elbow-joint.—Manipulation at this joint, so far as I am concerned, is connected either with the later treatment of fracture of the olecranon or with the movements adopted in the treatment of "tennis elbow." In the common fractures of the lower end of the humerus I am in the habit of commencing treatment in moderate flexion, about an angle of 60 degrees, and, after the first week, allowing gradually increasing active movement, always making sure that flexion is not being lost, until the patient works the joint free for himself, as he usually does. Fractures of the olecranon I do not operate upon unless I am unable to get a suitable apposition of the fragments with the arm in full extension. In most cases this apposition is attained and secured. At the end of six weeks an anaesthetic is given and the elbow is flexed. This is done by pushing with the two thumbs behind the olecranon so that the force which flexes the elbow also presses the fragments together and does not risk any separation. After two days' rest in a sling gentle active movements are commenced.

Tennis Elbow.—Much has been said and written regarding this troublesome condition. Whatever we may consider its pathology to be there is no doubt that many cases have been cured by manipulation. The clinical picture is not in dispute. Pain is felt on the outer side of the elbow during certain extension movements of the wrist. There is localized tenderness on pressure immediately below the external humeral condyle over the origins of the extensor muscles. It has always seemed to me, in examining these cases soon after the pain has occurred, that a tear of the muscle origin has taken place, and I still hold that view. Pressure localized to the tender area produces pain, but sustained pressure, distributed a little more widely, produces a definite sense of relief. I have applied a pad and adhesive strapping to such elbows on many occasions and have always succeeded in relieving the pain. One of my colleagues, a Davis Cup player, got an acute tennis elbow immediately before he had to play in a cup match in Paris. I fixed him up with a pad and broad strapping, and he played with comfort through a two days' match. At that time full use of the forearm was impossible for him without this form of support. After a few months the symptoms cleared up entirely, only to reappear the following year. Again the pad and strapping provided relief, and he has had no recurrence during the past four years. In some cases, however, the lesion heals with the formation of adhesions among the damaged muscle fibres. Dragging on this tissue causes recurrent pain, and the manipulations of surgeons and bone-setters are directed towards the over-stretching of this portion of the muscle and the breaking down of the adhesions. Mills, who wrote in the *British Medical Journal* in 1928, describes a manoeuvre which certainly over-stretches the muscle. He flexes fully the fingers and wrist and pronates the forearm. In this position the extensor group are at full stretch and complete extension of the elbow is limited. The joint is then forced into full extension whilst pressure is exerted over the external epicondyle. There is no doubt that many of the cases which are hanging fire under other forms of treatment are cured by this method.

Knee-joint.—This is the joint which is more frequently injured than any other, and in which many comparatively trivial lesions may produce serious and continued disability. Although the semilunar cartilages are so often torn, there are many other injuries of the knee which fall short of such gross damage, but in which some of the short, deeper fibres of the internal lateral ligament are ruptured, or, if greater force is applied, as in the cases where a heavy blow is given on the outer side of the knee, the longer fibres of the ligament give way. In this condition there is acute pain on the inner side of the joint with local tenderness, generally over the upper attachment of the ligament. Some degree of swelling is usually present. The movements which are most painful are those which put the injured structures on the stretch—abduction, rotation, and full extension of the knee. After such injuries, adhesions very frequently form

in the lateral folds of the synovial membrane which lie between the lateral ligaments and the bones. Full flexion and extension with rotation of the joint produces a rupture of these adhesions. In cases where the internal semilunar cartilage has been torn and is producing a true "locking," the necessary manipulation to free the joint consists, first, in widening the space between the inner condyle of the femur and the internal tuberosity of the tibia by abducting at the knee whilst the hip and knee are fully flexed. The tibia is then rotated outwards, thus opening the space in the inner side of the joint to its widest degree. The knee is now rotated in and fully extended. A full and free extension indicates that the displaced cartilage has been reduced. After a rest to allow the effusion of fluid to settle down, massage and gentle movements are commenced. Many torn cartilages are reduced successfully by bone-setters, but have later to be removed because of their recurrent slipping with locking of the joint.

Spine.—The extremely complex musculature and arrangements of ligaments has obscured diagnosis in this region, but a much clearer idea is now possible, largely owing to the work of our American colleagues. Strains of the lumbar region, where normal movements are relatively free, are common in all classes of workers, and many contusions of muscle and ligament occur, followed by the organization of the haemorrhage and the development of deep adhesions. This produces a condition which has been labelled "traumatic lumbago." Full movement of the spine is the correct treatment, and should consist of flexion of the spine and lateral flexion, which is always accompanied by rotation. These operations are carried out with the patient lying flat on his back on a hard couch. In some minor cases the desired effect can be produced without anaesthesia, the patient sitting up on the couch with his legs straight out in front and the head and shoulders then forced down towards the knees, thus over-stretching the erector spinae.

I have endeavoured to indicate some of the uses of manipulation and to show that we are well acquainted with its effects. Whatever has happened in the past it is essential that present and future generations of medical students should be shown the benefits which may be derived from the treatment, and be made familiar with the details of its methods.

ROYAL MEDICAL BENEVOLENT FUND.

At a recent meeting of the Committee forty-nine grants were voted, amounting to £1,025. The following were some of the cases helped.

Widow, aged 47, of M.R.C.S. who died last February at the age of 46, leaving a widow and two boys, aged 16 and 13. She expects to have an income of £100 a year. The Fund has undertaken to pay the school fees and maintenance of the boys for this term, amounting to £42. This grant will relieve the widow from immediate anxiety, and give her time to look for employment herself, which she hopes to find, as she is a fully trained nurse. The elder boy will leave school at the end of this term and find employment.

M.R.C.S., aged 75, widower; has been an assistant for the last eleven years, but has recently had to retire owing to defective hearing and eyesight. He is now living with his stepson, a country clergyman without means, upon whom he has no direct claim. Applicant's only income is the old age pension. Voted £40.

M.R.C.S., aged 60. Wife aged 47, and child aged 6. The applicant had to give up practice in 1928 owing to general paralysis. He has a pension for incurables of £20, which is his only income; his wife has £130 a year. Voted £40.

Widow of L.R.C.P. and S., aged 76. Has an Epsom pension of £40 and old age pension, £26. Fund voted £25 to bring the total income to £91 a year.

In consequence of the notice in our issue of May 9th of the grants voted at a recent meeting a special gift of £5 was received by the Fund "as a thank-offering for health after reading in the *British Medical Journal* of the assistance given to two women practitioners." This was a very generous and practical way of showing sympathy, and it is greatly hoped that the example may be followed by others. Subscriptions and donations should be sent to the Honorary Treasurer, 11, Chandos Street, London, W.1.

The Royal Medical Benevolent Fund Guild still receives many applications for clothing, especially for coats and skirts for ladies and girls holding secretarial posts, and suits for working boys. The Guild appeals for second-hand clothes and household articles. The gifts should be sent to the Secretary of the Guild, Tavistock House (North), Tavistock Square, W.C.1.