

## A CASE OF SEVERE HYSTERICAL CONTRACTURE OF THE LEG, AND ITS TREATMENT.<sup>1</sup>

BY FRANK R. FRY, A.M., M.D.,

PROFESSOR OF NERVOUS DISEASES, MEDICAL DEPARTMENT, WASHINGTON UNIVERSITY, ST. LOUIS, MO.

The special object of this communication is to recount the difficulties encountered in the treatment of a serious hysterical contracture. I shall therefore be as brief as possible, only dwelling on various features of the case sufficiently to reveal the nature of it.

The contracture developed in the spring of 1900, the girl being then 13 years old. The following is the best account I could obtain of it: In January, 1900, she had a severe cold, attended with much aching in all portions of the body. After a few days she complained especially of the whole left lower extremity, and refused to put the heel to the floor in walking. Soon after her mother noticed that it was beginning to draw up, or contract. The physician then in charge tried to straighten it by bandaging it to a splint. This always aggravated matters. From the mother's description it is evident that the first jerking and hysterical attacks began in these attempts at bandaging the leg. The physician directed the mother to apply the splint daily. This became every day increasingly difficult. Finally one day, during the process, the heel flew up to the buttock with great force. The splint was hurled across the room by the force of the contraction; and the leg remained in this extreme flexed condition. The seance terminated in a full-fledged hysterical paroxysm. This occurred two months after the patient first began to complain of the leg. After this she had a protracted attack almost every night. The mother relates that for three months the nights were full of returning terrors to herself and the child on account of these attacks. She remained in bed about eight months. The jerking in the leg meantime began to gradually subside and the attacks became less severe and less frequent.

I first saw the patient March 19, 1901 (the contracture being then one year old). Her mother, from whom I obtained the major portion of the history, accompanied her to the city. The parents were becoming very anxious about the leg. After

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consulting the leading regular practitioners in their vicinity, they had employed various irregulars, including "osteopaths." From the latter especially they had hoped for much. But nothing had seemed to make any impression on the leg. Although



Hysterical contracture. (A similar contracture is figured in Oppenheim's "Diseases of the Nervous System," American edition, p. 680.)

the general condition had improved considerably, the mother was very confident that there had never been the slightest relaxation of the contracture during sleep or under any other circumstance.

Dr. Philip Hoffman, who kindly looked after the orthopedic side of the case, describes below the condition. His description and the accompanying photograph reveal at once the character and intensity of it. I may add a few words, however, to complete

the history. She was placed in a hospital and carefully taken care of and observed. The first and second nights after her arrival the nurses were called to her room to find her in a frightened state, as they called it, the condition being very similar to ordinary night-terrors in a child. The mother assured us that this was the slight remaining remnant of the former severe hysterical attacks, and that it came every night soon after falling to sleep, but that of late it soon passed and the patient usually rested the remainder of the night. A hypodermic injection of 1-100 gr. of hydrobromate of hyoscine was given at bed-time. After the first or second dose the spells disappeared and have not recurred since. The drug was soon discontinued and blank injections kept up nightly for some time.

In the hospital we soon found that the patient was a bright, intelligent girl. She had a pleasant disposition, and readily adapted herself to the new surroundings. She never made complaints, and seldom alluded to her disability in any way. When the limb was more rudely handled, her objections to the manipulations were usually manifested only by silent resistance and never by any great outcry. I soon found that she was very anxious to have the deformity corrected, but she did not seem very hopeful about it. She used one crutch, and got about with it in lively fashion. Her general condition improved rapidly, due less to the medicine and other therapeutic measures than to the fact that with the spring season she could be out in the air a great deal.

My physical examinations were made casually and in piecemeal manner, and kept free from suggestive features. I found it difficult to determine the sensory conditions of the skin in the various portions of the limb. The hyperesthesia and alertness of the muscles were so intense that during an examination a stimulus of almost any kind threw them on their guard. The consequent spasm was evidently very painful, producing a state of anxiety and mental confusion which could not be assuaged by any assurance, and which made the sensory tests always unsatisfactory. The thigh seemed always to be quite hyperesthetic to all kinds of stimuli up to two inches above the groin. The leg and foot were generally somewhat, but never totally anesthetic, and more so on the anterior aspect.

There was pronounced pharyngeal anesthesia and also narrowing of the visual fields. Both of these conditions were much relieved with her general improvement. Aside from those mentioned, no hyperesthetic, anesthetic, or hysterogenic regions were found.

She was given tonics and a careful hygienic regime, including brush and salt rubs, cold ablutions to the spine, electricity, etc. She was never hypnotized, but many milder suggestive meas-

ures were tried. Her general condition improved until she seemed to be in perfect health and spirits. There was no change, however, in the condition of the contracted member.

On the 7th of June (after she had been under observation for two and a half months) I introduced into the spinal theca a little over half a grain of tropa-cocain. I used the tropa-cocain, and only a small dose, instead of the hydrochlorate of cocain, because I wished to have the constitutional symptoms as slight as possible. There was some flushing of the face and fullness in the head which was hardly complained of, and lasted for half to three-quarters of an hour. The anesthesia was not complete, the result of the injection being quite disappointing. However, there was some relaxation of the muscles, so that the heel was separated from the buttocks three to four inches for several hours. When the effect of the cocain had passed the contracture was as rigid as ever.

The especial reason for using spinal anesthesia and at the same time producing as little general disturbance as possible, was the hope of a suggestive effect which might enable us to introduce some process of gradual extension. There was so little promise in the procedure, however, that before repeating it I determined to produce complete chloroform anesthesia and discover the condition of the tendons and ligaments of the knee joint. This was so much worse than what I had hoped to find that at this juncture I called Dr. Hoffman to my assistance. He agreed with me that it was better, all things considered, to forcibly extend the leg at once. In deciding upon this action instead of first trying some more gradual process of extension, we were influenced especially by the following considerations: First, the decided, hysterical resentment toward restraining apparatus, the use of which would be necessary in a gradual process; and to this was added the extreme muscular hyperesthesia, which in all probability would only be controlled by total anesthesia. Secondly, careful measurements showed that the leg was considerably shorter than its fellow. The girl was growing rapidly, the disparity in the length of the extremities probably just as rapidly assuming a more important proportion.

The following is Dr. Hoffman's account of the condition and of the operation which he performed for its relief:

"On examination, June 17, 1901, the right knee was found in a condition of such extreme flexion as to cause the heel to indent the buttock. The hamstrings, especially the inner, were in a condition of tonic spasm and somewhat tender on pressure. The power of voluntary extension was entirely absent. The contractions became more marked, and the patient complained of pain whenever the slightest attempt was made to passively ex-

tend the leg. The right lower extremity was atrophied. Measurements showed that the right tibia was twelve millimeters, and the right femur ten millimeters, shorter than the left; a total of twenty-two millimeters for the whole limb. The circumference of the right calf was forty-four millimeters, and of the right thigh, at its middle, forty-one millimeters less than that of the left. The right foot was nine millimeters shorter, and its circumference over the ball twelve millimeters, and over the heel six millimeters less than the left.

"On June 26, while the patient was under the influence of chloroform, it was found that with considerable force the limb could be straightened only sixty-five or seventy-five degrees, that is, to not quite a right angle. Accordingly, under aseptic precautions, all the hamstrings were subcutaneously and thoroughly divided about three centimeters above their insertions into the tibia and fibula. The limb could now be readily extended to well beyond a right angle, but great resistance was again encountered when the leg was brought to about sixty degrees from a straight line. This was apparently due to shortening of the posterior ligament. The skin was also very tense. To secure better leverage and to prevent the head of the tibia from slipping into the popliteal space, a genuclast was applied, and, after considerable effort, the limb was brought into a straight position. This left a gap of about twelve centimeters between the ends of the cut tendons. During the latter part of the operation the stretched skin tore and retracted, leaving a denuded surface about eight by five centimeters in area. The tear, fortunately, did not take place over the tendon wounds, but about five centimeters below. The wounds were dressed and the limb retained in the straight position by means of a plaster of Paris dressing extending from the toes to the perineum.

"In eight weeks the separated proximal and distal portions of the cut tendons had become firmly united by new material growing into the gaps. On September 26, there being no tendency of the hamstrings to again contract, the plaster of Paris splint was discarded and a light steel brace, allowing motion at the knee, applied. Four months after the operation the patient could walk with fair use of the hamstrings. A thick sole was attached to the shoe of the affected limb to compensate for the shortening of twenty-two millimeters, which, of course, was not lessened by the operation."

The patient left the hospital for home December 14, almost six months after the operation. At that time there was a complete reaction of degeneration in all the muscle groups of the leg and foot, and a total loss of sensation of all kinds below the knee. For two months she had been having almost daily an electric massage of the foot, leg and thigh with a strong gal-

vanic current. The temperature and color of the affected member were remarkably good considering the extent and degree of the paralysis.

The following is a letter received May 7. It conveys the latest account I have of the patient, and at the same time a good idea of her mental capacity (above that of the average girl of fifteen years).

"Dear Dr. Fry:—After this long silence I am writing you my troubles again. My foot is entirely well and I have been wearing my brace quite a while. I also take the electric treatment all the time. Since spring came I have felt so much stronger and better in every way until the last two weeks. My head aches almost constantly. Have indigestion and feel so bad when I first awaken in the morning. But after I'm up awhile it wears off to some extent. I believe I am somewhat run down, that is, my general health not as satisfactory as it might be. I've been almost living out of doors during this lovely weather, walking, driving and riding horseback, too, some.

"If you have any suggestions to make concerning my condition, would be glad to have you write me at an early date.

"Most sincerely, \_\_\_\_\_."

In explanation of her statement, "my foot is entirely well," etc., it may be interesting to note that soon after her return home the great toe of the lame foot was crushed, and at about the same time several large blebs appeared on other portions of the foot and leg. In correspondence with the patient and her mother they could not explain how these traumata were produced. The mother thought that the blisters might have come from the hot-water bag used to warm the foot, but she was not certain about it and seemed entirely mystified over the injury to the toe. I naturally suspected hysterical mutilation, and communicated my suspicion to the attending physician, Dr. S. Sanford; but he was unable to throw any additional light upon the matter. He stated, however, that on account of the bad trophic conditions the repair of the lesions was very slow, and that he was using an elastic bandage with evident advantage. As no more lesions have appeared my suspicions were probably unfounded.

At this writing I am unable to report exactly the condition of the leg and foot. I had expected to see the patient in April or May for an examination. I have had occasional communications from Dr. Sanford, the mother and the patient. They convey no information of importance beyond that contained in the little letter here given. Considering, however, the state of affairs when I last saw her, six months after the operation, it is not probable that the innervation will be greatly improved.