T H E

Journal of the American Medical Association.

EDITED UNDER THE DIRECTION OF THE BOARD OF TRUSTEES.

PUBLISHED WEEKLY.

VOL. XII.

CHICAGO, FEBRUARY 23, 1889.

No. 8.

ORIGINAL ARTICLES.

A CASE OF REFLEX VALGUS.

*Read before the American Orthopedic Association, at Washington,
September, 1888.*

BY GEORGE W. RYAN, M.D.,

SURGEON TO THE ORTHOPEDIC CLINIC OF THE MEDICAL COLLEGE
OF OHIO, CINCINNATI.

Early in May of the present year I saw a robust lad of ten years, who was brought to me for advice concerning a deformity of his foot. He wore an apparatus which had been applied by an instrument-maker, but there had been no improvement in his condition, the father stated. The foot was in marked valgus as he walked, though there was little if any lameness. The history of the case was that some months before he had sprained the ankle, but it was not thought to be of much consequence, and with domestic treatment passed off in a few days. It was some weeks after this injury when it was noticed that, in walking, the foot was thrown in marked eversion. He complained of no pain and was, in fact, unaware of the changed position of his foot until his attention was called to it. He was fond of play, and his activity was in no way diminished by the position which his foot assumed. The condition was believed to be "a habit," to use the father's words, and his pride was stimulated in various ways in an endeavor to have him overcome it. It was of no avail, however, and the family physician was consulted. The patient was turned over to an instrument-maker, who constructed a simple apparatus of two steel uprights and an instep strap attached to an ordinary leather shoe. This had been worn for two or three months when I saw the boy. There was no appreciable improvement from its use.

I made no inquiries concerning the family history, though the father was a man of highly neurotic temperament.

The examination of the foot showed a marked valgus with a slight prominence of the scaphoid, the arch being as well marked as on the other foot. There was no swelling of the joint, no tenderness—in fact, nothing abnormal but the position. He had complete motion in every direction but inversion, and in this lacked but a few degrees of perfect. When the foot was brought to the

straight line the prominence of the scaphoid was not apparent. I was careful to notice this, as the father informed me that the physician who had previously seen the case was inclined to think that a slight displacement of that bone was the cause of the trouble.

There was a little atrophy of the calf—so little that it could have been but physiological. There was no contraction about the hip or knee, nor was there any tenderness. I examined the spine carefully for a trace of tenderness, but found it sound in all respects. I did not use any electrical test for the muscles of the leg.

The case impressed me at the time as a pure valgus, due possibly to a traumatism. The absence of pain and tenderness, and also of marked atrophy, certainly excluded any bone lesion. The boy did not seem to be of a neurotic type, having no resemblance to his father; and further, he looked upon any treatment as a burthen which would interfere with his accustomed out-door enjoyment. He was a sturdy, outspoken boy, and was irritable only on the subject of the apparatus, with which he found all manner of fault.

I recommended the cold douche and massage for the leg, and measured him for an appliance which consisted of a highly arched steel plate to which the foot was bound by straps of webbing, a shaft extending up the inner side of the leg, with a free joint at the ankle; the shaft or spring to be thrown out from 10° to 15° from the straight line. This was applied about a week later, and its immediate effect was perfect. He walked with the foot in the straight position. He was ordered to wear it day and night.

I did not see him for ten days or more, when he came to my office. It was reported that the foot was not doing so well and that he was beginning to turn it out as before. It was admitted that the apparatus had not been worn constantly, as the boy complained of it at night. He certainly did not walk as when he was last seen, but not so badly as reported. As the foot was released from the appliance it seemed to immediately settle into a more extreme eversion than I had before found. There was no excoriation, hardly a redness of the skin. On taking hold of the foot, I found the peronei group of muscles firmly contracted; the contraction coming on as the foot was touched.

The spasm was of the tonic type and relaxed only after several seconds of gentle traction, and was marked also when an attempt was made to apply the sole plate to the foot, and intensified as pressure was made by the straps to draw the foot to the straight line. This was a new development; at least, I was very much inclined to believe so, as I had examined him very carefully at the first visit and had detected nothing of this. The father knew nothing of it and I believe the boy was unconscious of it, for I tested him in various ways, by attracting his attention to other matters which would interest him thoroughly, and while so interested, if the foot were touched the contraction again came on. There had been no pain, there was no swelling or tenderness, and he was as active as usual, walking without lameness. This symptom seemed to be brought on by the use of the shoe and to be purely reflex. I believed that it might be overcome in a few days by the constant use of the appliance, and so advised, though I then thought that probably the case might have been a reflex—"hysterical," if you choose—one from the beginning. At any rate, I concluded to try the support for a short time. The promise was readily given that this course would be followed, though I had some doubt of it. I have not seen the boy since. The father came to see me just as I was about to leave the city in July. He said that the boy was no better, turned his foot out as much as before, and that peroneal spasm was the same. I told him to let me see the boy on my return and I would then dress the foot in plaster of Paris after the method used by Lorentz, of Vienna, in the treatment of ordinary flat foot.

Reviewing the case now I am of the belief that it was a neurosis, but if I was asked why so, I would be unable, perhaps, to say more than that I could think of nothing else, and also that the spasm of the peronei group did not imply anything more than a neurosis. As I have attempted to show in the preceding notes, there was nothing else which led me to this conclusion. I am unable to say positively that the condition was of reflex origin. There was nothing in the boy's temperament, his habits or surroundings, or in his manner, to point towards anything bordering on the hysterical. It was certainly not a spinal arthropathy.

The neuroses of joints must have, I think, a peculiar fascination for every orthopedic surgeon, for the reason, perhaps, that their solution is generally a difficult matter. In the ordinary diseases of joints we generally see them at second hand, where no special skill is necessary to make a diagnosis—it proclaims itself. I have found more difficulty in diagnosing obscure ankle troubles than in any other joint, the hip or the knee being far more easily managed. I can recall several cases which I have seen in the past few years,

most of them in consultation, where I insisted on further examination before giving an opinion, the symptoms about the ankle were so conflicting and obscure. In the hip or knee we are often able to determine at once the presence of the neurotic element. In the spinal arthropathies of children this is easily found, and its removal a question of but a few days.

The management of these neuroses of the ankle, it appears to me, presents unusual difficulties. If there be any genital irritation, of course that is easily disposed of, but when no spinal arthropathy or genital irritation exists there is very little that we can do in young children but to give general directions concerning exercise. Many of these conditions pass off without treatment as easily as they come. Tenotomy is often done for some of these neuroses, but it will be questionable as to whether any permanent benefit can be obtained from it. I am inclined to think that, when there is such marked spasm of a single group, the fixed dressing would be more serviceable than anything else.

114 West Ninth St.

MERCURIC BI-CHLORIDE IN DIPHTHERIA.

BY JNO. S. COLEMAN, M.D.,
OF AUGUSTA, GA.

For my views in regard to the use of mercury in diphtheria I am indebted to the publication in Squibb's Ephemeris of a letter from the late Dr. Reiter, of Pittsburgh, Pa. Prior to 1883 I had successfully tracheotomized two cases of laryngeal diphtheria, but only to see both patients die. The first survived the operation three days, but the second only two hours—death ensuing from a collapse of the membrane below the opening in the trachea.

On April 26, 1883, I was called to visit J. C. C., æt. 6, one of a family of seven as fine, healthy children as I have ever known. He had decided fever with diffused redness of the whole fauces. Next morning dirty-yellow looking patches were to be seen upon either tonsil. On the 29th, at 9 A.M., this exudation had developed into a thick yellowish-white substance presenting the appearance of a fried egg. The next day he died of laryngeal stenosis. My associate in the case pronounced it to be the most malignant he had ever seen. Each day the children were fully examined; three of them had the ordinary exudative sore throat.

On the evening of May 6 a robust little girl of three years was found to have fever with intense redness of the throat.

May 7, A.M. A slight exudation was apparent; Temp. 101° F.; P.M., Temp. 102° F.

May 8, 9 A.M. She has passed a restless