

Society Proceedings

AMERICAN NEUROLOGICAL ASSOCIATION.

Held in Washington, May 7, 8 and 9, 1907.

The President, DR. HUGH T. PATRICK, in the Chair.

(Continued from page 592.)

SOME FORMS OF ACRO-CYANOSIS AND THE RELATION OF ACROCYANOSIS TO RAYNAUD'S DISEASE, ERYTHRO- MELALGIA, OSLER'S DISEASE AND OTHER CONDITIONS.

By Dr. Lewellys F. Barker and Dr. T. J. Sladen.

The paper reports a case of chronic anesthetic acrocyanosis with gangrene of the end of two toes in one foot and malum perforans of the great toe of the other foot. Instances of acrocyanosis in connection with the other syndromes mentioned are given, and the relations of allied symptom-complexes are discussed. (The paper will be published in this journal.)

Dr. A. Gordon said that two or three weeks ago he exhibited before the Philadelphia County Medical Society a case almost identical in its clinical manifestations to that of Dr. Barker and Dr. Sladen's, and his conclusions were almost identical with those of these gentlemen. It was a case of a young man of twenty-two, who had a redness of both hands. He was a carpenter by occupation. There was no alcoholic history whatever. He noticed about five weeks prior to his coming to Dr. Gordon gradual on-coming redness of the hands, limited just at the level of the wrists. Of course the first thought was that of erythromelalgia, but the patient presented a number of little ulcers or scars which were the result of old ulcerations. Dr. Gordon thought of Mitchell's disease and of Raynaud's disease. However, a close examination showed that while apparently the case presented some features of erythromelalgia, on the other hand it presented signs which were antagonistic to Mitchell's disease. Dr. Gordon concluded that the case could not be classified as either of the two forms. It is allied to these two types, and it goes to show that the two extreme types of erythromelalgia and Raynaud's disease are not always present. There are many cases of so-called intermediary types.

Dr. E. Riggs said he was very much interested in Dr. Barker's paper because of a recent experience of his own. A man of forty-seven years of age had had for several years what he supposed were rheumatic pains in the feet. When he came under Dr. Riggs' observation there was a large ulcer of the left big toe, a slight congestion of the foot, and a cyanosis of the little toe. Dr. Riggs did not know how to classify the case. He did not regard it as one of Mitchell's disease; he could not regard it as typical of Raynaud's condition. However, the toe amputated itself, the pain disappeared (Dr. Riggs forgot to say that the pain was atrocious), and the man made an apparent recovery.

Dr. A. R. Allen said that in a case which Dr. J. K. Mitchell and he had reported before the American Association of Physicians last year the symptoms were very much like those in Dr. Barker's case, but they found over 20,000 white blood cells, with a distinct destruction of red blood cells, and 13 per cent. eosinophiles. There was intense itching, which was rather paroxysmal, coming in in the night. The urine showed a large amount of urobilin. During the hours of itching Dr. Allen examined the blood at intervals, and also examined it during the daytime, but there was no difference. He said he would like very much to know what the blood picture in Dr. Barker's case was.

Dr. H. H. Hoppe said he arose briefly to refer to a case of symmetrical erythromelalgia which he saw in a child four or five years of age, which was not typical. Both hands and both feet were affected, congested, red and swollen, with a formation of blebs; these blebs varied from the size of a split pea to the size of a ten cent piece. The special feature in this case was a subjective sense of pain and great heat, so that the child carried a small bucket of water around to put her hands in. The peculiar feature of the case is that the child recovered after six weeks under iodide of potassium.

Dr. P. C. Knapp said he wished to speak of a case of a young woman who had been under his care a year previously, who presented a very marked cyanosis of both hands, gradually diminishing on the arms, although there was a distinct congestion as high as the elbow, with the formation of very small ulcerations upon the tips of the fingers which were slow in healing. In this case there was no pain and very little sensory disturbance. There was one method in treatment tried at the suggestion of Dr. Cushing; namely, the putting an Esmarch bandage and tourniquet on the arm for a number of minutes each day and then letting it out in order to flush out the artery. The method, however, gave practically no relief.

Dr. W. G. Spiller said he had been forced to very much the same conclusion that Dr. Barker had reached, that these cases shade into one another more or less. In a case of erythromelalgia reported by Dr. Weir Mitchell and himself a number of years ago the blood vessels and the nerves of the big toe, which was amputated, were very much diseased. In another case of erythromelalgia that was under the care of Dr. Spiller, the big toe was amputated and the blood vessels and the nerves were very distinctly diseased. It is very important to determine how the nerves are examined. Degeneration if slight may entirely escape detection. Dr. Spiller believes that if the examination is properly made the peripheral nerves will in every case of erythromelalgia be found diseased in the limbs that are affected.

Dr. Spiller cautioned against operations on the feet of persons affected with vasomotor trophic neuroses. In the case which Dr. Mitchell and he had reported the big toe was amputated, and it looked as though the wound would never heal. In the other case to which he had referred it looked also as though the wound would not heal. He said that in the past two or three weeks he had seen still another case in which an operation on the foot had proved disastrous. The treatment which he thought would give most relief where pain in the foot was intense was either a resection of the nerve at the lower part of the leg or possibly stretching, but he would prefer the former.

Dr. J. J. Putnam said he thought it was very extraordinary, as Dr.

Barker had said, how many of these affections there are and how they run into each other, and yet on the whole, although the types are numerous, they are nevertheless types. The cases run pretty true in their own line. Each individual case remains as it was in the beginning. He said they had recently received at the hospital two cases in children which must be included in this general group—more especially as they are Hebrew children—where both arms were red almost up to the elbows, intensely red, the color fading slowly away, but there was no pain or sensory disturbance. Dr. Putnam's experience with the tourniquet had been a little more favorable than Dr. Knapp's. He had one patient with an ulcer on the side of his foot whose case belonged in this category, where the tourniquet was applied and he was put to bed. It was not possible to say whether the relief which followed was due to the tourniquet or to the rest in bed or to both, but it did seem as though the tourniquet was beneficial. His experience had been like Dr. Spiller's with regard to amputation. Frequently after amputation the wound does not do well.

Dr. Putnam said he would like to say a single word about the subject of acroparesthesia, of which he had seen a large number of cases. In the first description of this disorder, which he had written twenty years or more ago, he had suggested that there was perhaps a vascular change which involved the circulatory supply of the nerve endings, and this hypothesis still seemed to him admissible. It is certain that the skin sometimes changes color and that the muscles become stiff, so that vasomotor phenomena must be reckoned with. Yet these signs are not constant. The only constant feature is the paresthesia itself, but this could also be referred to a vasomotor change, if it could be shown that the nerve or nerve-endings have an independent circulation. This is possible, although the proof is lacking.

Dr. J. R. Hunt said he had seen several examples of the class of case that Dr. Spiller referred to, in which there was a great deal of pain and a great deal of redness in the extremities, more particularly in the toe, especially the big toe, and these cases were very often called erythromelalgia, and they do present many of the symptoms of erythromelalgia. In the cases he had seen, however, there was very marked defect in the pulsation of the pedal arteries, and he had regarded them as belonging to that very unusual type of endarteritis occurring in young adults of obscure origin. In these cases the changes in the peripheral arteries are so marked that any amputation near the site of the gangrene would be absolutely inadequate and healing delayed or impossible, and surgeons in such cases usually go above the ankle or the middle of the thigh; in fact they often do the operation without checking the hemorrhage, and they go on operating until they get a certain flow of blood which will presuppose the healing of the flap. These cases it seemed to him should be somewhat separated from the type Dr. Barker has described, particularly from the acrocyanosis and acroparesthesia and pure types of Raynaud's disease. He had seen one case which would come more particularly into this group, the case of a very young girl with marked scleroderma. She had repeated attacks of acrocyanosis, paroxysmal crises in the tips of her fingers and toes, as well as in the tip of her tongue, and on several occasions there was distinct substance loss. Just before her death she lost one or two fingers and he thought a toe.

Dr. F. X. Dercum said he did not think that the cases of sclerodactyly belong to these purely vascular or peripheral nervous cases, as would ap-

pear to be the case with erythromelalgia and allied states. Sclerodactyly is only a phase of scleroderma. It has distinct relations with morphea, it seems to be primarily neurotic, and he thought it important, while admitting relations between the various forms of peripheral dystrophies to keep them well defined.

Dr. L. F. Barker said he thought he should emphasize again the entire absence of pain in their case. The part was not at all painful; it was anesthetic.

As to the blood count, when the patient came to the hospital he was suffering from bronchitis, and had a slight polymorphonuclear leucocytosis, but after the bronchitis disappeared the blood findings were normal.

With regard to the Esmarch bandage for treatment he had had no experience, but he said he would like to point out the value of the Esmarch in diagnosis. If we have, for instance, in diabetes a gangrenous toe, we all know how useless it is to amputate the toe, at any rate until we have watched it for some time. Von Eiselsberg in these cases puts on an Esmarch from the toe up to the thigh, leaves it on ten or fifteen minutes and then removes it, and usually finds that while the blood returns very quickly to the whole upper thigh, the leg below the popliteal space remains pale. In that case if he amputates at all he does so above the knee; in other words, the application of the Esmarch and watching what happens afterwards gives, he believes, a clue to the seat of the arteriosclerotic disease. Dr. Barker said they had confirmed this in diabetic cases in the Johns Hopkins Hospital.

(To be continued.)

PHILADELPHIA NEUROLOGICAL SOCIETY.

January 22, 1907.

The Vice-President, Dr. J. W. McCONNELL, in the Chair.

BULBAR PALSY IN MULTIPLE SCLEROSIS.

By Dr. T. J. Orbison.

Dr. Dana and Dr. Spiller first called attention to the rarity of the disease in this country. In Starr's experience it occurs once in about 370 cases. The case exhibited is from Dr. Spiller's Polyclinic Hospital service. The ordinary type of the disease begins with numbness and increasing weakness of the legs. The gait is wobbly, rather than ataxic. The feet seem to wander about as in drunkenness. Oppenheim describes it as "vacillation." It is due to an irregular contraction of the muscles of the trunk, and the entire body sways in the attempt at locomotion. Tendon reflexes are increased and there may be a Babinski reflex on either side or on both. There is tremor in the hands, so much so, at times that a glass of water held to the mouth will be so shaken that its contents will be spilled. Bulbar symptoms often appear early, the speech is scanning rather than mumbled. The tongue may not be atrophied. Scanning is due to ataxia or intention tremor of the muscles of speech production. There are certain mental symptoms suggesting paresis that are often noted. All of the above symptoms, except the Babinski reflex, are seen in the case exhibited.

Dr. F. X. Dercum said that unequal involvement of the two hands and wrists is, of course, not uncommon. Sometimes the inequality is very decided, but he had never seen a case limited absolutely to one side. He recalled one patient where the difference between the two sides