The compresses were now reapplied as before and left for another twenty-four hours. This treatment was continued throughout the case without variation, and the results surpassed our most sanguine expectations. No inflammation occurred, and there was no pain from the first hour or two after they were dressed.

The left eye was quite well in four or five days, but for the sake of controlling motion in the right, the bandage was continued upon both until the twenty-first day. After that, it was kept upon the right eye only, with very light compression, until the twenty-eighth day, when it was removed altogether.

At this date, December 1st, 1872, I note as follows. The eye is free from congestion; cornea clear and bright, except that, at five or six points, there are powder stains, or small grains of unburned powder deeply imbedded. These seem to be doing little harm, and it is not thought best to disturb them. The eye is rapidly becoming accustomed to light, and giving no trouble. Vision is good enough for any ordinary employment; quite as good as before the accident. The patient insists that it is better than before, but he is quite certainly mistaken.

I present these cases on account of the severity of the accidents, and the material variation in treatment, from that most commonly recommended. They would seem to illustrate well the virtue that there is in putting a wounded eye perfectly at rest, both to restrain inflammation, and to prevent corneal opacity, which friction certainly tends greatly to induce.

COLD SPRING, N. Y., Jan. 1880.

ARTICLE VII.

THREE CASES OF SYPHILITIC MUSCULAR CONTRACTION. By ARTHUR VAN HARLINGEN, M.D., Chief of the Skin Clinic, Hospital of the University of Pennsylvania.

ALTHOUGH, as is known, no structure of the body is exempt from the influence of the syphilitic poison, yet the muscular tissues are among those most rarely attacked, and cases of muscular syphilis are not often recorded in medical literature. For our knowledge of these affections we are indebted to various French writers, notably Notta,¹ Buisson,² Fournier,³ and Mauriac.⁴ Virchow has also written upon the subject in his treatise on constitutional syphilis.

Formerly all varieties of muscular syphilis were believed to be of tertiary origin, but it is now known that lesions of the muscles may occur at any period of the evolution of the disease. The later manifestations

¹ Archives Gén. de Méd., Dec. 1850, 4e série, t. xxiv. p. 413.

² Gaz. Méd. de Paris, 1846, p. 211, and Tribut à la Chir. Moderne, t. 1, 1858, p. 527.

³ Leçons sur la Syphilis, Paris, 1873, p. 718.

⁴ Leçons sur les Myopathies Syphilitiques, Paris, 1878.

belong usually to the category of gummata, the earlier are divided by Fournier into (1), muscular pain or myosalgia; (2), muscular contraction; (3), muscular debility; (4), muscular atrophy; (5), tremor. The cases I am about to describe belong to the earlier lesions of syphilis, and are included under Fournier's second class. They are as follows:—

CASE I.—Mrs. A. H., coloured, 25 years of age, and the mother of a healthy child of two years, suffered with some suspicious sores about the genitalia in November, 1877. She presented herself for treatment at the Dispensary for Skin Diseases, in April, 1878. At that time she showed a scattered papular syphiloderm about the thighs and over the face, together with mucous patches of the mouth and vulva. She was ordered a quarter of a grain of the protiodide of mercury thrice daily with a local application; under this treatment the various lesions gradually disappeared, and the patient did well until the early part of June, 1878. About this time she began to complain of gradually increasing difficulty of movement in the right arm, motion at the elbow-joint, particularly extension, becoming slowly more and more impaired, and giving rise to pain referred to the outer condyle of the ulna, and to the insertion of the biceps. Severe pain was also experienced for a time in the right ankle-joint, and later in the knee, but this soon passed away spontaneously. On examination the patient, who was pregnant, was found in fair general health, with no symptoms of dermatosyphilis. There was general muscular soreness with some stiff neck; excepting occasional pain in the ankle and knee there was no joint trouble. The only complaint was with regard to the right arm, which hung in a partially flexed position without giving any pain excepting when flexed or extended beyond a certain point. Extension beyond an angle of 150° was impossible on account of what seemed to be a shortening of the biceps. Any attempt to make extension beyond the limit mentioned was met by a sudden check, accompanied by pain, referred to the point of insertion of the tendon of the biceps into the ulna. The forearm could be almost, but not quite, completely flexed upon the arm. The attempt at complete flexion aroused some pain, referred to the insertion of the tendon of the triceps into the outer condyle of the humerus, and extending for a short distance up the arm. There was some slight sensitiveness to pressure in the muscular structure of both biceps and triceps, the tendinous extension of these muscles being still more sensitive. Close examination of the elbow-joint, the bursa of the tendon of the biceps, the skin and the connective tissue about the elbow, showed these to be quite normal.

Iodide of potassium in the dose of ten grains thrice daily was substituted for the mercury, and later $\frac{1}{4}$ grain corrosive sublimate in tincture of cinchona thrice daily was administered. The patient did not take the medicine very regularly, and several relapses occurred during the summer, although upon the whole improvement took place steadily. On November 25, she was delivered of an apparently healthy child, who, however, was subsequently treated for syphilitic disease of the bones.¹ During February, 1879, the muscular affection finally disappeared, and up to eight months later had showed no signs of returning.

CASE II.—Mrs. E. H., coloured, 44 years of age, mother-in-law of the former patient, and living in the same house, probably contracted syphilis

¹ This child's case was reported in the *Philadelphia Medical Times*, Sept. 1879, under the title of "Bone Syphilis in an Infant, accompanied by pseudo-paralysis and a peculiar spasmodic affection of the larynx."

at the same time as her daughter-in-law, although she could give no account of an initial lesion. She was first seen by me at the Dispensary for Skin Diseases on April 17, 1878. She presented at that time a papular syphiloderm scattered over the thighs and buttocks, and on the scalp. She was ordered one-third of a grain of the protiodide of mercury three times a day, which was afterwards changed for the iodide of potassium, at first in ten-grain, and later in fifteen-grain doses, alone, and at times combined with bromide of potassium, thrice daily. She remained under observation during the remainder of the year, taking the medicine however somewhat irregularly. In addition to the symptoms noted when the patient was first examined she subsequently suffered with gunmata on the left leg, and with various nervous symptoms, headache, dizziness, multiple vision, and vibration of objects looked at with both eyes. In addition, deafness and roaring in the ears, together with stiffness of the cervical muscles, coming on towards night and disappearing when she grew warm in bed, were very troublesome symptoms.

Toward the end of January, 1879, when she had been under observation some nine months, she began to experience a certain stiffness and soreness about the left elbow-joint. This grew daily worse until at the end of five days she came to see me and was carefully examined. It was found that she could not place her hand on the back of her head, nor could she extend her forearm beyond an angle of 135° . Flexion also beyond a right angle seemed to be hindered by an enlargement of the biceps, but palpation failed to detect any abnormality in the muscle. The attempts at extension caused pain which was referred to the tendon of the biceps brachialis at its insertion and along its course for about two inches. Extreme pronation gave more pain than any other movement. There was no soreness in the muscular tissue of the biceps, but for some days the tissues about the insertion of the triceps were tender to pressure. The elbow-joint, the bursa of the tendon of the biceps, the skin and the connective tissue, were all apparently normal. The right knee was somewhat swollen; the leg could be fully extended but could not be flexed much beyond a right angle, and attempts at further flexion gave rise to quite severe pain referred to a point in the knee just below the patella.

The patient was ordered a mixture containing ten grains of iodide of potassium with $\frac{1}{3}$ grain corrosive sublimate four times daily. This dose was subsequently doubled. The condition of the muscles improved slowly but steadily under this treatment until April 18, by which time all traces of the affection had disappeared. Six months later the patient reported herself as enjoying good health, with the perfect use of her limbs; she had taken no medicine for four months.

CASE III.—Margaret W., a healthy, married, white woman, was not aware of having suffered any initial lesion of syphilis when, early in April, 1878, she was suddenly seized with headache and very high fever, together with a plentiful papular eruption and sore throat. She came under my notice for the first time on April 24, 1878, at the University Hospital, when she was found to be suffering from an extensive papular syphilitic eruption which had invaded all parts of the skin. There was a small mucous patch over the hard palate, but no other lesion in the mouth or pharynx. She complained of rheumatism in the right shoulder and left knee, which were both very stiff at night. (She had never suffered from rheumatism before.) She appeared thin, pale, and weak, although her appetite was good. She was ordered $\frac{1}{3}$ grain protiodide of mercury thrice

daily. Under this treatment the patient's condition rapidly improved, excepting that rheumatism of the right elbow still troubled her. On May 25, her treatment was changed to $\frac{1}{32}$ grain corrosive sublimate in a teaspoonful of compound tincture of cinchona thrice daily. General glandular engorgement, which had not heretofore been observed, was now quite marked. The patient attended very irregularly through the summer, and probably took but a fraction of the medicine prescribed. Her general condition however improved rapidly, and the eruption had entirely disappeared, when she again came under my notice on October 16, complaining of severe pain in the left jaw. She was then ordered four grains of the iodide of potassium with $\frac{1}{32}$ grain corrosive sublimate thrice daily. The patient again disappeared and was not seen by me until March 28, 1879, about a year after the earlier symptoms of infection had appeared. At this time she complained of a helpless condition of the left arm, which she said had gradually become stiff, so that she "had to nurse it as if it were a baby." The joint seemed rigid, and the forearm could not be fully extended. Circumstances prevented a full note of her condition being taken at this time, but she was again placed under treatment and once more disappeared, not being seen until Sept. 24, 1879. At that time it appeared that for a month previously the arm had been getting gradually worse, and that movements were made with difficulty. Occasional shooting pains were experienced in the left shoulder, elbow, wrist, and knee-joints; none on the right side. The pain in the elbow extended to the fingers, which were slightly swollen and stiff. There was some tenderness over the top of the shoulder-joint, extending down along the outer border of the left scapula. The same sensitive condition subsisted along the course of the biceps, the elbow-joint, and in the ulnar groove. The forearm could be almost completely extended without pain; extreme extension gave rise to pain at the insertion of the biceps. There was pain in the ulnar grooves on complete flexion. There was no muscular trouble in the left thigh and leg, although extreme extension and flexion gave rise to pain referred to the knee-joint. None of the other muscles in the body or limbs were affected. On damp days and at night pains were experienced in the elbow-joint, and the arm felt heavy and dead and was often carried by the patient as if it were paralyzed. The same story of neglect was continued during the autumn, and when the patient was seen on December 11, 1879, the biceps was still slightly affected while the right triceps brachialis was very markedly so, the patient being unable to flex the forearm beyond a right angle. Extreme pronation of the forearm gave rise to pain referred to a point on the dorsal side about four inches above the wrists. There was also some pain in the neck and left knee and nodes could be perceived over the tibiae. She was ordered ten grains of the iodide of potassium thrice daily, and returned a few days later somewhat improved, the forearm being capable of flexion somewhat within a right angle. Since that date the patient has not been seen.

An analysis of these cases and a comparison of the symptoms here presented with those noted by the observers above quoted,¹ as well as by Ces-

¹ Mauriac's prolix but exhaustive monograph gives the most complete account of the affection. A review of this work by Keyes of New York (Archives of Dermatology, vol. v. 1879, p. 108) presents the essential points in brief.

bon,¹ Jullien,² and Bumstead and Taylor,³ permits the following summary of the various facts known with regard to syphilitic muscular contraction.

Syphilitic muscular contraction may attack any muscle of the body but occurs by preference in the biceps brachialis, and next to this in the triceps brachialis. According to Mauriac the muscles of the left side are those usually attacked, and if both sides are attacked it is to an unequal degree. In two of my cases the left side was affected; in the third, the right side. Examination shows that the diseased muscle, while entirely unchanged in form or consistency, is contracted so that (if the biceps, for instance, is affected) the forearm is flexed upon the arm at a variable angle. In Notta's cases the angle formed varied from 90° to 160° . In my Case I. the angle was 150° , in Case II. it was 135° , in Case III. it was probably from 160° to 170° . Within this angle the limb can be moved, but extension beyond a certain point is impossible, and the attempt at forcible extension is accompanied by pain referred to the insertion of the tendon in the radius. When the triceps is affected as well as the biceps a sort of muscular ankylosis results, neither flexion nor extension being possible. Usually the muscle itself is indolent; pressure and kneading do not give rise to pain. Now and then a case is met with (as my Case I.) where there is exaggerated sensibility manifested in the body of the muscle. More usually pressure upon the tendon develops tenderness. General pains throughout the muscular system, with stiffness, soreness, and occasional cramps in certain muscles are usual. In each of my cases stiff neck, coming on towards night, was noted particularly. The contraction develops insidiously, the whole course of the affection being slow and deliberate. Untreated, it may run on with remissions and relapses for a year or more.

The existence of syphilis is alone the necessary element in the etiology of the disease, muscular contraction being one in the train of symptoms. It belongs to the early manifestations of syphilis occurring most commonly, according to Mauriac, between the sixth and the tenth month. Cesbon's two cases occurred in the fourteenth and fifteenth month respectively. In one of my cases the muscular contraction first made its appearance in the seventh month; in the two others between the twelfth and the fourteenth month of the syphilitic disease. It usually occurs in light cases and where the skin lesions have been dry rather than ulcerative. The nervous element is often prominent (as in my Case II.). Mauriac says it is more apt to occur when pains in the muscles and fibrous tissues are common rather than in cases where the joints tend to be in-

¹ Etude sur la contracture musculaire syphilitique. Paris, 1879.

² Traité Pratique des Maladies Vénériennes. Paris, 1879.

³ Treatise on Venereal Disease, 4th ed. Phila. 1879. (This admirable work, of which the fourth edition has appeared since this paper was written, contains a succinct but clear description of the chief features of the affection under consideration.)

volved. This distinction does not appear in my cases where both muscles and joints were affected. Neither age, sex, nor occupation seem to exert a causative influence.

If we attempt to investigate the pathology of syphilitic muscular contraction we are met with only negative signs. The joint, as has been pointed out, is intact, without swelling or pain. The bones are unaffected. The muscles themselves are, to all external appearances, normal; they show no swelling, no general or circumscribed induration. Even sensitiveness to pressure is not constant. It is not myalgia in the ordinary sense of the term, for in true myalgia the muscle is sensitive to pressure, while, however severe it may be, it permits motion—if the pain can be borne—while in syphilitic muscular contraction motion is absolutely prevented. Mauriac regards the process as a sub-inflammatory myositis, but Fournier denies this hypothesis, the almost entire absence of pain on pressure and the absence of induration or hardness being contrary to such interpretation. Neuritis cannot be accepted as a cause, for there is no evidence of nervous or spinal lesions. The sensitiveness of the tendon seems to point toward this as the seat of the affection, the muscle being influenced only secondarily. But as, unfortunately, no microscopic examinations of the structures involved have as yet been made we are in reality left to conjecture. In other words, as Fournier says, “we see an effect of which we cannot explain the cause.”

The diagnosis of syphilitic muscular contraction may usually be made by reference to the concomitant lesions, for the affection occurs at that stage of syphilis where either some trace of the disease remains evident, or where the patient can at least recall some fact which will point to syphilitic infection. But the strongest evidence of the affection is negative. It may be safely said, in the present state of our knowledge, that no other affection can give rise to the symptoms above detailed.¹ They are quite characteristic. The diagnosis however is a matter of much importance, as, untreated, the affection tends to recovery only after a more or less prolonged course.

The treatment of contractive muscular syphilis should be that of the later stages of the general disease. Perhaps the mixed treatment is the most advantageous. Local applications influence the course of the affection very slightly, but they may be used, especially in the form of anodyne liniments, etc., where pain is present in the muscle or tendon.

The prognosis is favourable in any case, as the affection appears to tend to spontaneous gradual recovery. But its course may be much abbreviated and the occurrence of relapses obviated by regular and continuous

¹ The hysterical “muscular contraction” of Brissaud and Richet presents, indeed, some points in common with the affection under consideration, and chiefly in that it is prone to attack the biceps. But the concomitant symptoms would, probably, in any given case render the diagnosis easy.

treatment. Untreated it may last several months, occasionally several years. Among my cases, Case I., which was pretty steadily under treatment, recovered in eight months. Case II., which continued constantly under my supervision and careful treatment, recovered in ten months. Case III. however, where treatment was employed only at irregular intervals and for short periods, was characterized by several relapses, and when last seen, some ten months after the affection first appeared, was not cured, nor even markedly ameliorated.

ARTICLE VIII.

REMOVAL OF A LARGE, INTERSTITIAL UTERINE FIBROID. By T. GAILLARD THOMAS, M.D., Professor of Diseases of Women in the College of Physicians and Surgeons, New York.

No variety of uterine myoma is possessed of more interest and importance, from a surgical standpoint, than that which develops within the interstitial structure of the uterus, projects very decidedly neither towards the peritoneum nor the endometrium, and receives the name of interstitial or intra-mural tumour. The surgical resources at our disposal for sub-mucous growths which occupy the cavity of the uterus, as well as for those even of the largest size, which are attached to the peritoneal surface of the uterus, and occupy the abdominal cavity, are at the present day very efficient and satisfactory. This is by no means the case with the interstitial fibroid, and every advance in the direction of its systematic treatment by surgical means will be received with favour where there is so much need of improvement in our resources.

The following case is related, not as an isolated and desultory example of a remarkable operation, but as an illustration of a system which, by its efficiency and simplicity when applied to appropriate cases, will in the future, I trust, accomplish a great deal of good where at present very little effort at surgical relief is ever made.

Georgiana P., *at.* thirty-six years, who has been married fourteen years, and had one child twelve years ago, since which time conception has not occurred, was admitted to my service in the Woman's Hospital, Dec. 20, 1879. The patient was perfectly well until April, 1879, when, just after a menstrual period, she was suddenly seized with profuse uterine hemorrhage, accompanied by severe uterine tenesmus. This lasted only twenty-four hours, but it exhausted her very much indeed. At every menstrual epoch which has occurred since that time she has had profuse hemorrhage, with what she styles "bearing-down pains." This has lasted usually about nine days. During the months of July and August she suffered very much from dysuria and rectal tenesmus. For the last four or five months before admission she had been almost entirely unable to walk,