

necessity of practical dissection in acquiring anatomical knowledge, while but few schools give practical courses in physiology. Notwithstanding this, it is certainly true that the medical man needs to employ his physiological knowledge as often as he does his anatomical learning. When such instruction is properly given we will have much more intelligence displayed in the practice of medicine. One needs to know the anatomy of the heart in order to detect valvular disease of that organ, but the number of functional diseases of the heart which one is called upon to treat is certainly greater than that of structural diseases of the same organ, and yet the student in most of our schools, has no practical instruction on the innervation of the circulatory system. How many of us were able from knowledge gained from our undergraduate course to intelligently apply electricity to any part of the body, to mark out anæsthetic areas which would result from injury to or disease of any nerve, to intelligently interpret the reactions obtained in testing the knee reflex, to properly ascertain the degree of sensation in any muscle, to explain the relation between injury to the floor of the fourth ventricle and the glycogenic function of the liver, or in short did we have any positive physiological knowledge other than a general idea of the processes of digestion, absorption and elimination? Do we not feel the want of this training in the work of every day? Should we not see to it that our students have this instruction? A six weeks' course in laboratory physiology will in my opinion be of great service.

(7) Pathology. The necessity of practical instruction in this branch will be admitted by all. Such a course should embrace both gross and minute pathology. The bungling way in which post-mortem examinations are often performed, and the little information which the medical man usually gets from such an examination, afford abundant evidence of the fact that gross pathology is too much neglected in our schools. Without microscopical pathology, the determination of the nature of many growths is quite impossible. Let us give six weeks to the dead-room and laboratory courses in pathology.

To sum up I would say that the following laboratory courses are essential:

- (1) Analytical Chemistry, twelve weeks.
- (2) Practical and Surgical Anatomy, twenty-four weeks.
- (3) Bacteriology, ten to twelve weeks.
- (4) Physiological Chemistry, ten or twelve weeks.
- (5) Histology, six weeks.
- (6) Physiology, six weeks.
- (7) Pathology, six weeks.

This makes a minimum of seventy-four weeks. The greater part of this work should precede clinical instruction. Besides the above mentioned courses, therapeutics, including electro-therapeutics is now being taught in some schools largely by laboratory methods, and this tendency will grow.

Laboratory methods will soon largely modify clinical teaching. Amphitheatre clinics are giving away to bedside and section instruction. Laparotomies and other capital operations are now made by the student in some of our schools on dogs. The surgeon as well as the chemist has his laboratory. The student delivers the alcohol baby from the rubber mother before he is permitted to enter the lying-in-room. It is no longer necessary to spoil a hatful of human eyes before one becomes a skilful ophthalmologist.

## Clinical Department.

### PAIN IN THE SOLE OF THE FOOT ON WALKING.

BY J. J. PUTNAM, M.D.

At a meeting of the Society for Medical Observation of April 6, 1891,<sup>1</sup> I mentioned a mode of treatment which I had found effectual in several cases of a painful affection of the sole of the foot. The communication was unpremeditated, and I had not posted myself particularly upon the literature of the subject, but I presumed that the affection was the same as that which has been admirably described by Dr. E. H. Bradford<sup>2</sup> under the name of Morton's affection of the foot.

I write now mainly to enclose a spontaneous tribute to the value of the treatment which I suggested.

I may say that I do not claim any originality for the treatment, but that having been myself a sufferer for many years and having therefore tried various modifications of the plan suggested, my experience may be worth recording.

The affection as I have seen it consists in a tenderness of the sole, usually most marked opposite the space between the distal ends of the third and fourth metacarpal bones. In walking there are often referred sensations along the corresponding toes. If walking is persisted in, soreness often ensues, which finally may give rise to dull pain throughout the whole leg. It is worse in wet and cold weather.

The treatment consists in protecting the tender point, either by putting a thin but stiff leather inside-sole into a broad shoe, with a hole cut of appropriate size and shape, or else by making a depression at this point in the sole of the shoe. This can be done by having the last made with a projection on it at the proper place.

I have found it very important to make the hole in the inner sole of oblong shape, the long axis (which I think should be an inch or an inch and a half in length) running parallel with the metatarsal bone. In my own case the opening begins within about a quarter of an inch of the outer edge of the sole, and then slants forward and inward. The space between the heads of the third and fourth metacarpal bones lies opposite the opening. I find the proper place to make the opening by putting aniline ink over the tenderest spot on the sole of the foot, and then letting the patient put his naked foot into the shoe containing the inner-sole, which has been moistened with water so as to absorb the stain. Of course, there is some smearing, but the most anterior point is obtained in this way.

After a time, the leather of the boot-sole is pressed up into the hole in the inner-sole, and then it may be necessary to renew the boot or shave off the elevation.

In my own case, I have had my boots made for many years on a last which has a prominence on the sole corresponding to the hole in the inner-sole which I had formerly worn. Except when wearing a shoe made on this last, I can rarely walk a mile without great discomfort; and it must be admitted that in wet weather, which invariably makes the trouble worse, walking is still painful.

The letter to which I referred is as follows, from Dr. Frank Holyoke, of Holyoke, Mass.:

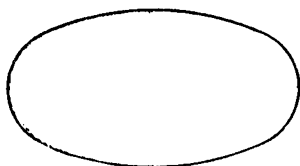
<sup>1</sup> Boston Medical and Surgical Journal, June 18, 1891.

<sup>2</sup> *Ibid*, July 16, 1891.

"In the *Boston Medical and Surgical Journal* of June 18th, 1891, page 607, I was delighted to find your reference to 'cases of pain (on walking) in the sole of the foot, radiating out to certain toes,' for I was at the time much embarrassed in my attempt to relieve the above complaint in two ladies, both of whom had been sufferers for many years; one having had two joints of the fourth toe amputated by some physician who thought in so doing to afford relief. Since the operation (one year ago) however, she has suffered even more.

"I had your treatment carried out immediately in both cases.

"The shoes fit nicely about the ankle and instep, but are broad enough for all five toes to lie flat, without lateral pressure. They afforded no relief until the oval of about this size



was cut out of the inner sole, following your directions.

"No. I put on her shoes ten days ago. On the fourth day, being so pleased with the instantaneous relief, she walked up Mount Tom and back, a distance of five miles, and says, 'I did not know that I had any feet. I felt as though I had wings.' Hers are buttoned shoes.

"No. 11 (the one where the toe was so stupidly amputated) had a pair of shoes made to order which lace down to the toes, by which means she can regulate the pressure. She has worn them for six days now, and reports equally satisfactory relief.

"From your few lines I have made enough to keep me in shoes for a year, and I wish to extend to you my most hearty thanks! If you care for a sober report on these two cases, I would be happy to send it."

## Medical Progress.

### RECENT PROGRESS IN OBSTETRICS.

BY CHARLES M. GREEN, M.D.

#### CHOREA GRAVIDARUM.

RICHE<sup>1</sup> concludes, in his thesis in this subject, that although this affection is very rare, the etiological influence of pregnancy in the production of chorea is incontestable. It is seen to occur in the course of pregnancy in women at other times unaffected, to recur only in successive pregnancies in the same persons, and to get well before delivery. Riche believes that the prognostic importance of the affection has been much exaggerated. He thinks the administration of chloral in large doses in an efficient means of treatment.

#### THE IMMEDIATE CLOSURE OF LACERATION OF THE CERVIX.

Garrigues<sup>2</sup> (New York) reports a case in which his patient nearly lost her life by arterial hæmorrhage from a torn cervix: hot water and styptic iron injections failed to arrest the bleeding, and finally a tampon was used with success. Garrigues remarks that when such an accident occurs in a hospital, it is a small matter to unite the cervix and effectually arrest hæmor-

rhage; but that in private practice such a course is not always feasible, and then a well-applied tampon is of the greatest value.

In 1874 the late Dr. Pullen (New York) recommended and practised the immediate closure of the badly lacerated cervix with silver wire, whether or not there was hæmorrhage. Garrigues, however, believes that hæmorrhage should be the only indication for immediate closure, his own experience being that many lacerations heal spontaneously, so that an operation would be superfluous. On general principles, too, he believes that post-partum operations on the cervix expose the patient to a possible infection; but if there is hæmorrhage which resists hot water and styptics, he holds that primary suture, under proper asepsis, is preferable to the tampon.

[As was pointed out in a previous report, if a vaginal tampon is used to control hæmorrhage from a torn cervix, it is wise to plug the uterus with sterilized gauze, after the manner of Dührssen, before applying the vaginal tampon; but at the best, the most that can be said in favor of tampon treatment for cervical hæmorrhage is that in private practice it is of somewhat easier application than the suture. The latter operation is not so difficult, however, as it might seem to one who has never performed it. The writer has done the primary operation four times, — three times to arrest hæmorrhage, and once for experimental purpose. In these cases he operated with the patient on the back, cross-bed, forceps position; the anterior and posterior cervical lips each seized with a volsellum forceps. The cervix was thereby easily drawn to within easy sight and touch at the ostium vaginae: this traction on the cervix has the further advantage that cervical hæmorrhage is thereby checked or much diminished, as was explained in a previous report. If necessary, retractors may be held by the two assistants supporting the legs, by which means the cervix is sufficiently exposed; no speculum is used.

The cervix once exposed, the operation of suturing is extremely simple. In his four cases the writer used a curved needle and continuous cat-gut suture: there seems to be no necessity of using silver wire. From his present point of view the writer is strongly in favor of the suture in preference to the tampon in checking hæmorrhage from a torn cervix; but he proposes after a more extended experience with the primary operation to report his cases and results. — REP.]

#### FURTHER EXPERIENCE IN THE USE OF THE UTERINE TAMPON IN POST-PARTUM HÆMORRHAGE.

Stäheli<sup>3</sup> (Berne) reports that in the years from 1880 to 1888, in the Clinic and Policlinic of Berne, six cases were lost from acute anæmia *post partum*, which in his opinion could probably have been saved by the intra-uterine tamponade. Since 1888, in these clinics, this tamponade has been used forty-nine times, partly on account of active hæmorrhage, partly as a prophylactic. Of these cases one ended fatally from sepsis after Cæsarean section.

The chief indications for tamponing the uterine cavity were atony of the placental surface, whether the placenta be normally or abnormally seated, general uterine inertia after Cæsarean section, atony in uterus subseptus or bicornis, failure of contractions after removal of hydatidiform mole, and hæmorrhage after

<sup>1</sup> Thèse de Paris, 1891: *Revue des Sciences Médicales*, April 15, 1892.

<sup>2</sup> *American Journal of Obstetrics*, November, 1891.

<sup>3</sup> *Korrespondenzblatt für Schweizer Aerzte*, 1891, No. 21; *Centralblatt für Gynäkologie*, 1892, No. 21.