much to develop the school, and have given us much good advice, both in facts appertaining to the cure of the sick, and in the manner in which we may safely go forward and assist the further developments of the healing art.

Æsculus Hippocastanum. Of this remedy we know but little, the provings are not exhaustive and have been made with too large doses; but we do know that whole flocks of sheep having been fed during the winter on horse chestnuts, have been afflicted with Tabes Dorsalis, and many have died of it. The constriction in the rectum, which has been observed by the provers of Æsculus, is often present in this disease. The lameness in the back as well as the severe aching in the knees, with aching in the lumbar and sacral region, are fully stated by the provers. In several cases where there was also present a great soreness of the spine, an almost complete paralysis of the lower limbs, Æsculus Hippocastanum has been of great service. Like all other remedies I have only administered one dose of the 200th potency and have not repeated even that dose till its effects were exhausted.

We hope that these few remarks, which by no means exhaust the subject, may induce some of our colleagues to give their own experience in the treatment of this dreaded disease, and give us some additional indications for the use of these, or other remedies.

LEUCORRHŒA.*

BY ROLLIN R. GREGG, M. D.

November, 1868.

C. W. BOYCE, M. D.,
Secretary Central New York Homœopathic Society.

DEAR DOCTOR: In response to your urgent solicitation, I send you, for your society, the following paper upon the important subject which is to be up for discussion at your session next month.

All physicians, I believe, having the welfare of their patients at heart, must have experienced something of the perplexities incident to the proper and successful treatment of leucorrhœa. I would myself class this disease as next in importance to chronic nasal catarrh, and next to this in the difficulties of treatment and the obstinacy of cure. And as I think these difficulties and this obstinacy arise, in part, at least, from the want of a fuller knowledge of the pathology of this malady, and of its relations to other diseases, and diseased conditions; no less than from the little knowledge we yet have as to how our treatment may affect all those relations, I proceed upon these bases in my discussion of the disease under consideration. If it shall be thought that I do not give sufficient attention here to the therapeutics of leucorrhœa, your members will please bear in mind that there is some advantage in being able to determine, if we can, how much and just what there is to be done in a given case, together with all the bearings of what we do; and *what we must not do*, in prescribing for that case, as we shall see further on.

First, then, we will consider the pathology of leucorrhœa. Not to go into confusing details, I will only mention the more common points, in this, with which all are familiar. Leucorrhœa, as all must know, is the result of, or arises from, acute

* This is the paper we promised to publish a year ago in these pages, but could never before find space for it. It will be seen by the date given above, that it was written before we commenced the publication of our Quarterly, and repetitions will be found upon a few points hitherto presented and discussed in these pages, but this must be excused, as we have been unable to get time to change the article to the changed circumstances; besides, had we done so, it would not be the paper we presented for their consideration.

or chronic inflammation, or it may be only from a simple irritation of the mucous membrane of the genital organs of the female. It is the chronic form of the malady with which we have most to deal, and which is the most perplexing to treat, and obstinate of relief. That arising from acute inflammation, generally gives but comparatively little trouble to the physician, unless it degenerates into the chronic form.

Both the chronic inflammation, and the irritation, are more commonly confined to the vagina; still they frequently do exist in, or extend to, the mucous membrane of the uterus, and sometimes to that of the fallopian tubes. Lesions more commonly exist in or about the mouth and neck of the womb.

The physical character of the secretions, so far as relates to consistency, color, etc., it is of some importance to consider, in this, as in all other diseases attended by, or causing abnormal discharges. The secretions of leucorrhœa are of various consistencies, colors and conditions in other respects. They may be very thin, or watery, and almost as transparent as water, and vary in density from this up to semi-solid masses, these still maintaining a marked transparency; or they may be whitish, yellow, bloody, or greenish, though varying much in consistency in all, but showing more density in the semi-solid transparent masses named, and in the greenish, than in the other forms. All these different kinds of secretions may, I believe, come from the vagina, or from the uterus. When coming from the vagina they are all discharged without pain in the expulsion, and the same is true of the fluid secretions from the uterus, but with the semi-solid masses, spoken of, it is different. When these are formed, or the matter composing them is secreted in the uterus, there will always be, of necessity, decided labor-like pains in expelling them into the vagina, while they will fall from the latter, whether formed there, or received from the uterus, of their own weight, and lodge upon the linen or limbs of the patient. I have met several cases showing these characteristics in the matter expelled, and the manner of expulsion, from the two organs named.

In seriousness, the secretions rank as follows, in my observations: That which varies the least from natural mucus, of course, indicates the mildest form of leucorrhœa, the watery and transparent,—not ichorous—the next in seriousness, then,

comes the semi-solid transparent masses, with the whitish next, then the ordinary yellow secretion, next the bloody, and the green or greenish the worst of all, unless it be that ulcers actually exist from which the yellow or bloody discharges come; but in that case it is no longer simple leucorrhœa with which we have to deal, but ulceration, which may, or may not be, malignant in character.

Our next inquiry must be into what I will call the physiological characteristics of the secretions of leucorrhœa. Here, if I mistake not, we have an interesting field for research, in which we shall find more of importance than in all else besides, with reference to the pathology of this disease. And yet, so far as I know, its bearings upon the welfare of the patient have never before been considered. What, then, are the secretions of leucorrhœa physiologically considered? They are, in the first place, as a matter of course, more or less mucus in character, but they are more than this, they are *albuminous* as well, that is, they all contain *albumen*, and this being here is a loss, or waste, of just so much of this important constituent from the blood. In proof of these assertions I give the following:

Lehmann tells us in his great work upon Physiological Chemistry, that there cannot be the slightest irritation of *any* mucous membrane, without there being albuminous discharges therefrom, as a result of such irritation. So unequivocal is he upon this point, that he speaks of it in no less than three different places in the course of his work. In confirmation of this, so far as it relates to the mucous membrane of the female genital organs, I will cite another authority. Copland, in his Medical Dictionary, vol. 2d, page 81, gives a table of *one hundred and eleven* cases of leucorrhœa, for the purpose of showing the state of the uterine orifice and the *character* of the discharges; and of this number, no less than *eighty-four* are distinctly mentioned as having *albuminous* discharges, while eleven cases had an "aqueous discharge," and sixteen an "opaque discharge streaked." Whether these twenty seven cases exhibited anything of an albuminous character of the secretions, we are not told, and this is not essential for our purposes here, for under Lehmann's assertion that there cannot be the slightest increase in the normal quantity of mucus secreted by any mucous membrane, as a result of irritation thereof, without its containing

albumen, we know that they must have contained it. If we needed more upon this point we have it in the following: Carpenter says in his physiology, page 233, that the chief organic constituent of mucus is mucin, and that "this appears to be an albuminous compound." So that, in fact, it seems that all the secretions in leucorrhœa, which we are accustomed to call mucus, are really discharges of albumen or albuminous compounds. That this is a waste of so much of this highly important, nay, indispensable constituent of the blood, is self-evident, indeed it must of necessity be so, for there is no other possible source from which it can be drawn but from the blood. Then we have the authority of both Andral and Christison, that all the albumen discharged in the urine in albuminuria, is drawn directly from the blood, in other words, that the serum shows a loss of this constituent exactly proportional to the amount of it found in the urine. And as it is in the one case, so it must be in the other, as I have ample proof, but neither time nor space to give it here.

Of the general effects of this drain I need but cite albuminuria as an example. True, there are points of great difference between the symptoms and diseased conditions arising, both throughout the general system, and locally, in the two sets of organs named, in consequence of this like drain of albumen through them; which differences must correspond to the nature and functions of each class of organs; but there are points of great similarity as well. The *debilitating* effects in the two cases must be the same, or very similar, notwithstanding one allopathic author asserts that the discharges in leucorrhœa seldom, if ever, cause the debility arising in this disease. What a preposterous opinion to advance when such discharges rob the system of so large a portion of the only constituent of the blood that can give the patient muscular strength. (Leibig, as cited by Carpenter, page 56.)

But this effect, bad as it is, is by no means all we have to encounter in these cases, for the loss of the albumen leaves each and all the other constituents of the blood, in a relative excess in the blood-vessels, as compared with the albumen remaining; every particle of which excess becomes thereby entirely useless in normal nutrition, therefore foreign matter, and because of this, an irritant, or disease-creating agent. Proof of all this I could give, showing that often, diseases of the most fatal character are caused in this way, but time will not permit, therefore I must content myself with simply asserting what I feel the utmost confidence can be proved. All diseases and diseased conditions, arising in this way, that is, all that are caused by the deposit, or irritation in other ways, of any portion of the above-named excess must be classed as *secondary*, and I will now call attention to the more prominent of these which are liable to arise in leucorrhœa, solely as a result of the loss of albumen from the blood in its discharges.

The proportion of water to albumen, in healthy blood, is such that for every ounce of the latter lost from the blood-vessels, there would be five and three-fourths ounces of the former, or the water of the serum, left in excess in the blood. So that in a case of active leucorrhœa, where two or three, or even more ounces of albumen might be lost every twenty-four hours, such an amount of water would soon be brought into excess in the blood as to make this very thin, or watery, as we frequently find to be the case in the severer forms of this malady. Then, as this constant accumulation of such an excess of water in the blood cannot be tolerated, without distending and bursting all the blood corpuscles,—through the inevitable action of the law of endosmosis upon them, under such circumstances, thereby causing immediate death,—it must be expelled from the blood-vessels. This is either done through the kidneys, causing greatly increased secretions of urine; through the skin, causing unnatural perspirations; or by deposit into the areolar tissue of the muscular system, causing anasarca; or into some one of the internal cavities, causing that dropsical disease whose name would be determined by the cavity into which it was poured. Ascites in females, I believe, to not uncommonly arise from this cause, while hydrothorax, hydropericardium, and even hydrocephalus might be caused in this way. The water in all these instances, whether ejected from the system entire, secreted into the areolar tissue of the muscular system, or into any of the internal cavities, escapes from the circulation in a natural manner and without violence, for it simply transudes the coats of the capillaries, and probably always does this through the aid of endosmosis.

Again, the proportion of red blood-corpuscles is such, that

the loss of one ounce of albumen would leave over seven ounces of them in excess in the blood-vessels. The necessity for the expulsion of such excess is as great as it is with the surplus water, but they being organized bodies, with no natural outlets through the coats of the vessels, by means of which they can be expelled in their organized state, very different and much more violent methods are resorted to, than is the case with the water, to rid the circulation of them. They must find their escape by rupturing the capillaries, and thus pass off in more or less violent *hæmorrhages*, or they must be broken down and dissolved by the excess of water, and being now in solution may be excreted along with this through the coats of the capillaries; or yet again be deposited in living tissues and only expelled at the end of suppuration. In the first instance they will often find their outlet from the system in menstrual hæmorrhages, for I am confident that many cases of unnaturally profuse menstruation, even where this amounts to metrorrhagia, are caused by an excess of blood-corpuscles left in the blood-vessels by a loss of albumen in leucorrhœa; and furthermore that this is likewise often the case in the female system, when albumen is lost in consequence of chronic irritations and abrasions of other tracts of mucous membranes, than that of their genital organs.

The excess of corpuscles in all these instances is seeking an outlet from the blood-vessels, and frequently finds it in the menstrual function, by first congesting and distending the capillaries of the parts from which the menstrual discharges come, until, when nature affords the opportunity, these minute but now dilated vessels give way, and because of being greatly distended, bleed as badly as would broken vessels of much larger size than they are in their natural condition. The hæmorrhage in such cases will often, if not always, continue till all the excess of corpuscles is, for that time, carried off, and it may continue until much more than the excess is expelled. Even hæmorrhage from the lungs, or from other organs may arise in this way, as a result of leucorrhœa, that is, by the excess of corpuscles, not finding an outlet through menstruation, but by distending the capillaries in such organs instead, and finally rupturing them, when we would have a hæmorrhage to deal with corresponding with the organ through which it came.

But when such excess is not expelled by means of hæmorrhages, the excess of water left in the circulation by the same cause, is set to work upon them, through *endosmosis*, and greater or less numbers of them, according to the quantity of the excess of water held in the blood-vessels, are distended to bursting, by their absorption of water from the thinned serum. They are then dissolved, when their debris is gotten rid of by being excreted through the coats of the capillaries as already mentioned. There is a somewhat curious action had upon the red corpuscles under this operation for their destruction. During the process of distention, the coloring matter is dissolved, and *washed out of them*, leaving them *colorless*, and to all appearance like the natural colorless corpuscles. Sometimes, in consequence of so much of the excess of water being retained in the blood, this action takes such a direction, as to decolorize or wholly destroy so large a proportion of all the red corpuscles that the whole mass of blood is rendered almost colorless, as so often happens to young females at, and after puberty, when we have a case of *Chlorosis* to deal with. And all this resulting from the loss of albumen through some tract of mucous membrane, which is generally, though not always, that of their genital organs in a simple leucorrhœa.

With females in more advanced years, however, or rather, in all cases where most of the excess of water finds a ready exit from the vessels, a portion of the excess of blood-corpuscles is not so liable to be ruptured, nor continued in the general circulation, but decolorized and deposited in the capillary vessels of the mucous membrane of the vagina, or uterus, at or near the point of escape of albumen. When so deposited, they are as much foreign matter as anything that might be introduced into these vessels from without, and must excite inflammation and suppuration, just as any other foreign matter of like consistence would, and would thus produce the ulcerations so common in bad cases of leucorrhœa. Indeed I think the yellow discharges in most, if not in all cases of this malady, can be shown to be the changed blood-corpuscles, decolorized as I have stated, for I have abundance of proof that as these are deposited in the capillaries and give up the water that distended them, they shrink and become opaque and yellow. Their deposit is simply a congestion or clogging of them in the