Another patient, attended by Dr. Denison and myself, a girl about sixteen years old, lay more than eight hours with no pulse at the wrist, and with the other ordinary symptoms of extreme collapse. A similar course of medication was followed with the same favorable results.

Of the two fatal cases, which occurred subsequent to the first of September, one was that of a very intemperate man, about 35 years old, whom I found in a low state of collapse. From the first, the case appeared very unpromising; and, owing to the extreme obstinacy of the patient, no regular course of medication could be adopted. He died about three hours after I first saw him.

The other was that of a girl, ten years old, who, without any premonitory symptoms, was instantaneously attacked with severe vomiting, purging and spasms. Soon after the administration of remedies, the vomiting, purging and peristaltic murmur ceased; but the pulse failed, coma supervened, and the patient died within five hours from the attack.

New-Haven, Ct. July 16th, 1833.

PURPURA HEMORRHAGICA.

READ BEFORE THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

BY W. CHANNING, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

I HAVE been informed by the Secretary that by a late vote of the Society it has become my duty to make, this evening, a written communication on some subject connected with medicine. I comply with this duty with pleasure. * * * * *

A variety of subjects presented themselves to me, when looking round for a topic for this paper, and I have selected from them a disease which is not of very frequent occurrence, and of which the following sketch may not be wholly without interest. This disease is *Purpura*.

Willan placed *Purpura* among the Exanthemata, and describes five species. Other writers have taken it out of this class, as it wants one of its elements, viz. fever, and as it is also destitute of the leading symptoms of inflammation, which also characterize that class. *Purpura* has been defined 'an eruption characterized by patches, sometimes of a vivid red, sometimes of a livid hue, the extent of which is sometimes only a line, and at others of several inches, preserving their color under pressure, usually to be found on the skin only, but also existing in some cases on the mucous membrane, in which case there are often hemorrhages.' This definition applies to the disease as presented in the varieties above referred to, especially the latter clause. In one variety, hemorrhagica, all the textures have been found invaded by it; even the serous and muscular tissues have not always escaped. I shall speak principally of *Purpura Hemorrhagica*.

The eruption in this species presents much variety. I have seen it very extensive, especially in the lower portions of the lower extremities. The skin here is almost everywhere covered with spots. Still they are distinct. Sometimes they are quite small, at others larger, not

however amounting to patches. I have met with them in one instance of the latter description elevated above the skin, and rounded, containing blood, which the thinness of the cuticle allowed to be readily effused by very slight violence or mere friction. It has in other instances appeared in large purple patches with an irregular outline, having shades of yellow and green, and so exactly resembling severe bruises as to be taken for them. In one of these cases, a child about 4 years of age, the mother could only account for the appearance by believing that her child had been severely and cruelly beaten at the infant school at which she had placed her. She brought her to me to be confirmed in this notion. The patches were very remarkable on the face of this child, a situation in which I had never before seen them, and where they very rarely occur. They were also noticed on the hairy scalp. I inquired into the state of the child's health. This seemed to be quite good, and so it turned out. The dejections were however bloody, copious, and more frequent than natural. The case was clear enough, and I could not but be surprised at the strength manifested by this child, suffering as it did a serious disease, certainly not in its slightest form.

In another case, the patches were quite solitary, and unusually few in number. There was a large one on the left hip, one on the left arm, one on the right, and not more than two or three elsewhere. I was called to see this patient, a girl about 15 years old, on account of the appearance of these large livid patches, which the mother thought were local mortification, and threatening great danger. This patient had a most bloodless aspect. The face, lips, gums, tongue, and skin except where diseased, were deadly pale. I soon discovered the cause of all this, and at the same time the true nature of the disease. She had suffered excessive uterine hemorrhage for three weeks, the catamenial period so called having lasted all this time, no alarm being excited until the appearance of the purpura. In this case life seemed obviously threatened, but the patient after a time recovered. It was many days however after the hemorrhage had ceased, and the eruption had disappeared, before this patient could be taken out of bed. It is the only case I have seen in which the blood came from the vagina. Similar cases are on record.

I have met with but two cases in which the gums have been noticeably diseased. The mouth in one of these cases was much affected; the eruption was confined to the legs and inside of the mouth, and there was no active hemorrhage from any portion of the mucous tissue. This was a female aged 40, very poor, and having been better off she suffered great mental anxiety and depression from change in her circumstances. She had long been in feeble health. Her first severe symptoms were distress and pain in the right side and epigastric region, with long and most distressing paroxysms of vomiting. She gradually got better. But after some months, the lower extremities were attacked with pain; then the side and epigastrium, as before. While taking pills of Butternut, her mouth became excessively sore, the gums spongy, livid, breath intolerably fetid. These symptoms subsided, but after a few weeks pain again attacked the legs, and true patches of purpura appeared. This patient after a long period of illness recovered something like health. I will not detain the Society by an enumeration of the many symptoms that occurred in this case.

One of the most distressing cases of this disease I have seen, and one more strikingly marked by characteristic symptoms than perhaps any other, was that of a girl aged about 18. In no one has the whole system been so much affected. She got her feet wet May 4, 1829, at what should have been the catamenial period. This was followed on the same day by pain in the left knee, and soon by the ordinary symptoms of acute rheumatism. For this she was treated till the 18th, when I saw her. She had now painful and bloody discharges from the rectum, very offensive breath, great pain in the extremities and bowels, difficult breathing, profuse sweats, heavily loaded tongue, pulse 120. I desired to see the legs. They were found covered with the true eruption of purpura.

This case was under treatment more than two months. In this time many changes occurred. Thus, the eruption extended to the hips, and there hemorrhage took place, then slight ulcerations. The mouth was at times sore, gums swelled and livid, at times the pain would be most severe in one shoulder—now the bowels would seem to recover, and then hemorrhage would again take place. The pulse was always very rapid, and the whole aspect truly morbid. When the tongue cleaned, it would be found denuded, dry, glossy, and then a new coat would form.

The changes the eruption underwent were quite striking; at one time nearly disappearing, with general marks of amendment, and then appearing again with general relapse into former state.

This patient recovered under the ordinary treatment of purpura hemorrhagica, when accompanied with great debility. Till the eruption was discovered, she had been treated for rheumatic fever.—I may remark here, that pains in the extremities, especially in those which are the seats of the complaint, has been a very constant and severe symptom of the cases which have fallen under my notice.

In another case, a girl about 12, the eruption was mistaken for mortification. Her strength and general health were good. She came six miles to see me. Hemorrhage from the bowels existed in this case, and the gums were swollen. The diagnosis and treatment were soon settled, and the patient in no long time was well.

Another case was a boy 17 years old. Had a similar attack several years before this year, 1828. General health good. Eruption at first confined to legs, ankles and feet. It bleeds easily; sores are left, which after a time scab, dry and do well. Present disease two days standing. The eruption suddenly changes place, or appears in new and distant ones; sometimes about epigastrium, accompanied with deranged stomach—sometimes on arms, with pain in them. I first saw this lad June 7th, 1828. On the 20th he was well; at least no symptom of his disease remained.

This patient was soon again attacked as before. I saw him July 17th. The eruption had been preceded by severe stomach symptoms, probably produced by errors in diet. He soon mended, when on the 25th, having committed much imprudence while in warm bath, he was seized with severe inflammatory symptoms, affecting mostly head, neck and chest. Very active treatment was used, and by the 30th his skin was nearly well. A new crop of eruption came out that day, on the legs. It was of the same character as in the first attack in which I saw him. It faded

in legs, and then appeared in arms. By the 7th of August the legs were well, and arms much better. On the 13th the eruption had all disappeared, and with it all other marks of disease.

Such is a rapid sketch of some of the cases of the disease, as it has been presented to me, and these show how various are its forms, or the circumstances under which it may appear. I have but little to say about its remote causes. Its nearest cause 'has been attributed to a want of tone in the extremities of the vessels, thus permitting the blood to escape on the cutaneous surface or mucous system.' The blood would seem to undergo changes which may favor this escape. At least it has been found in a state of remarkable fluidity after death. Dissection has discovered the disease in almost every tissue, and effusions of blood in every organ of the body.

Diagnosis.—Purpura may be confounded with syphilis. The previous history will settle this point. Also with scurvy, and the diagnosis is not so easily made out. I have known the disease in the mouth confounded with mercurial ptyalism; and one patient, it was before remarked, was for many days treated for rheumatism without a suspicion of purpura, the bloody stools being ascribed to the remedies employed for the mistaken disease, *colchicum autumnale*. In one case, I have shown that it was ascribed to external violence. Now I think these facts deserve to be remembered, especially the three latter. They are not mentioned in the diagnosis by writers on the disease. A very striking symptom being an external one, the eruption, it can only be discovered by inspection. This should never be neglected when a case presents the other concomitant phenomena of purpura.

Purpura ranks among generally serious and often mortal maladies, and we are advised in it to give a cautious prognosis. I have never known it fatal, but I do not hence consider the caution misplaced.

Treatment.—We are in this to have much regard to the history of the case, and to the most pressing symptom in all grave cases, the hemorrhage. In the very young, and the old and exhausted, a judicious tonic course has its advisers. In the child I referred to, I trusted to purgatives. I know of no remedies which have answered a better purpose than purgatives. Some praise jalap, castor oil, calomel, and *sp. ter.* in large doses. I have preferred saline cathartics, acidulated with dilute sulph. acid; and when I would relieve distress in the bowels, and diminish stools, especially bloody ones, I have found nothing better than

Tr. Opii gtt. xxv. vel xx.

Acid. Nit. dilut. gtt. xx. vel xv.

Mist. Camph. oz. i. M.

In the case with uterine hemorrhage, the greatest benefit seemed to be derived from ice applied to the external organs and the vagina. In fact, internal astringents did little or no good, as far as I could judge. I should have used the *tampon*, if the ice had failed. We have need of caution in the use of the last, as the blood in purpura does not coagulate. Especially should this be borne in mind should such a means be resorted to in hemorrhage from the bowels. We may in this last use astringents and even injections by the rectum. Cold affusions to the body, and washes of cold vinegar and of chlorides of lime to the eruption, may be safely employed.

Bloodletting has a place among the remedies of purpura. I have no experience to offer concerning it. The cases in which it has been thought to be indicated are strong and robust adults, where signs of inflammation are decidedly marked, and the hemorrhage of the disease slight. The objections in other cases are the additional exhaustion bloodletting produces, and the difficulty in checking the flow of blood from the arm.

A question may arise as to the propriety of the nosological place which this disease occupies. It ranks among diseases of the skin, and gets this place in systems of nosology—at least the species to which I have more particularly directed your attention—from one of the least important of its manifestations, viz. the eruption. It may in short be questioned if it be, in this species, an eruption at all. Its gravest symptoms are manifested in other situations, in a tissue which, let it be approximated anatomically as nearly to the cuticular as we please, is certainly but little more than a modification of that texture, I mean the mucous. But when we learn that the hemorrhage may and does take place in every texture of the body, the relations of the disease to the skin become still farther limited. I have no new name to offer for this disease, and there is much evil in changing names. I have alluded to the subject, however, in order to intimate that the affection of the skin is the least important sign of the disease, and to show that we are to use it principally if not only as a guide to the other organic modifications—to borrow a term from modern French pathology—rather than as claiming any particular regard in the treatment of the malady of which it forms so unimportant a part.

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MODERN IMPROVEMENTS IN PRACTICAL ANALYSIS.

IN a lecture on forensic medicine recently delivered by Dr. Cumin, at one of the medical schools in London, the progress which has been made in the chemical department of this science within a few years is exemplified in the instance of arsenic; and the following facts stated by the professor in this connection may not be uninteresting to our readers. From documents dated about the year 1774 we learn that it was then the practice to decide, as to the existence or non-existence of arsenic in the contents of the stomach, simply by the odor of the dry residuum when burnt. It was even said by a respectable author of that period, that in the event of other means failing, good evidence might be procured by burning the whole body, and observing the smell which arose from it. With this we may place in strong contrast the achievements of the present century. Hahnemann, an eminent authority on the subject of arsenic, on which he wrote about thirty years since, the same author in fact who has since distinguished himself as the founder of homoeopathic medicine, was supposed to have performed a great feat, by operating on ten grains in