

error; they put off the operation too long. When it is certainly known that there is a stone in the bladder, and that it is too large to get along the urethra, no time ought to be lost in having it cut out, before the patient's habit becomes too irritable, or the stone is so far increased in size, that it cannot be extracted without a laceration of the parts.*

CHAP. XXV.

INVOLUNTARY DISCHARGES OF BLOOD.

(*Hæmorrhagiæ.*)

SPONTANEOUS or involuntary discharges of blood often happen from various parts of the body. These, however, are so far from being always dangerous, that they often prove salutary. When such discharges are critical, which is frequently the case in fevers, they ought not to be stopped. Nor, indeed, is it proper, at any time, to stop them, unless they be so great as to endanger the patient's life. Most people, afraid of the smallest discharge of blood from any part of the body, fly immediately to the use of styptic and astringent medicines, by which means an inflammation of the brain, or some other fatal disease, is occasioned, which, had the discharge been allowed to go on, might have been prevented.

Periodical discharges of blood, from whatever part of the body they proceed, must not be stopped. They are always the efforts of Nature to relieve herself; and fatal diseases have often been the consequence of obstructing them. It may, indeed, be sometimes necessary to check the violence of such discharges; but even this requires the greatest caution. Instances might be given where the stopping of a small periodical flux of blood from one of the fingers has proved fatal to the health.

In the early period of life, bleeding at the nose is very common. Those who are farther advanced in years are more liable to hæmoptoe, or discharge of blood from the lungs. After the middle period of life, hæmorrhoidal fluxes are most common, and, in the decline of life, discharges of blood from the urinary passages.

Involuntary fluxes of blood may proceed from very different, and often from quite opposite causes. Sometimes they are owing to a particular construction of the body, as a sanguine temperament, laxity of the vessels, plethoric habit, &c. At other times they proceed from a determination of the blood towards one particular part, as the head, the hæmorrhoidal veins, &c. They may likewise proceed from an inflammatory disposition of the blood, in which case there is generally some degree of fever: this likewise happens when the flux is occasioned by an obstructed perspiration, or a stricture upon the skin, the bowels, or any particular part of the system.

But a dissolved state of the blood will likewise occasion hæmor-

* A tea-spoonful of pure magnesia taken two or three times a-day has of late been discovered to be a most effectual preventive of the gravel and stone, and is of service where alkalis fail to relieve the increased secretion of uric acid, and to prevent its forming calculi in the kidneys; it also agrees better with the stomach.

rhages. Thus, in putrid fevers, dysentery, scurvy, malignant small-pox, &c., there are often very great discharges of blood from different parts of the body. They may likewise be brought on by the too liberal use of medicines which tend to dissolve the blood, as cantharides, the volatile alkaline salt, &c. Food of an acrid or irritating quality may likewise occasion hæmorrhages; as also strong purges and vomits, or any thing that greatly stimulates the bowels.

Violent passions or agitations of the mind will likewise have this effect. These often cause bleeding at the nose, and I have known them sometimes occasion a hæmorrhage in the brain. Violent efforts of the body, by overstraining or hurting the vessels, may have the same effect, especially when the body is long kept in an unnatural posture, as hanging the head very low, &c.

The cure of hæmorrhage must be adapted to its cause. When it proceeds from too much blood, or a tendency to inflammation, bleeding, with gentle purges and other evacuations, will be necessary. It will likewise be proper for the patient in this case to live chiefly upon a vegetable diet, to avoid all strong liquors and food that is of an acrid, hot, or stimulating quality. The body should be kept cool, and the mind easy.

When an hæmorrhage is owing to a putrid or dissolved state of the blood, the patient ought to live chiefly upon acrid fruits with milk, and vegetables of a nourishing nature, as sago, salop, &c. His drink may be wine diluted with water, and sharpened with the juice of lemon, vinegar, or spirits of vitriol. The best medicine in this case is the Peruvian bark, which may be taken according to the urgency of the symptoms.

When a flux of blood is the effect of acrid food, or of strong stimulating medicines, the cure is to be effected by soft and mucilaginous diet. The patient may likewise take frequently about the bulk of a nutmeg of Locatelli's balsam, or the same quantity of spermaceti.

When obstructed perspiration, or a stricture upon any part of the system, is the cause of an hæmorrhage, it may be removed by drinking warm diluting liquors, lying a-bed, bathing the extremities in warm water, &c.

BLEEDING AT THE NOSE. (*Epistaxis.*)

BLEEDING at the nose is commonly preceded by some degree of quickness of the pulse, flushing in the face, pulsation of the temporal arteries, heaviness in the head, dimness of the sight, heat and itching of the nostrils, &c.

To persons who abound with blood, this discharge is very salutary. It often cures a vertigo, the head-ache, a phrenzy, and even an epilepsy. In fevers, where there is a great determination of blood towards the head, it is of the utmost service. It is likewise beneficial in inflammations of the liver and spleen, and often in the gout and rheumatism. In all diseases where bleeding is necessary, a spontaneous discharge of blood from the nose is of much more service than the same quantity let with a lancet.

In a discharge of blood from the nose, the great point is to de-

termine whether it ought to be stopped or not. It is a common practice to stop the bleeding, without considering whether it be a disease, or the cure of a disease. This conduct proceeds from fear; but it has often bad, and sometimes fatal consequences.

When a discharge of blood from the nose happens in an inflammatory disease, there is always reason to believe that it may prove salutary; and therefore it should be suffered to go on, at least as long as the patient is not weakened by it.

When it happens to persons in perfect health, who are full of blood, it ought not to be suddenly stopped, especially if the symptoms of plethora, mentioned above, have preceded it. In this case it cannot be stopped without risking the patient's life.

In fine, whenever bleeding at the nose relieves any bad symptom, and does not proceed so far as to endanger the patient's life, it ought not to be stopped. But when it returns frequently, or continues till the pulse becomes low, the extremities begin to grow cold, the lips pale, or the patient complains of being sick or faint, it must immediately be stopped.

For this purpose the patient should be set nearly upright, with his head reclining a little, and his legs immersed in water about the warmth of new milk. His hands ought likewise to be put in lukewarm water, and his garters may be tied a little tighter than usual. Ligatures may be applied to the arms, about the place where they are usually made for bleeding, and with nearly the same degree of tightness. These must be gradually slackened as the blood begins to stop, and removed entirely as soon as it gives over.

Sometimes dry lint put up the nostrils will stop the bleeding. When this does not succeed, dossils of lint dipped in strong spirits of wine may be put up the nostrils, or if that cannot be had they may be dipped in brandy. When it arises in elderly people, or returns too frequently, or continues till the patient becomes faint, it ought to be stopped as quick as possible: to effect this, the patient should be exposed freely to cool air, and placed nearly in the erect posture, with the head inclined somewhat backward; drinking freely of cold liquor, and some saline medicine,* and living abstemiously. Besides these means, the patient may immerse his head in a pailful of cold water impregnated with the muriate of ammonia, or common salt, and snuff vinegar diluted with cold water up the nose; or some astringent wash† may frequently be thrown up the nostril from which the hæmorrhage proceeds, by means of a syringe. At the same time the body, if necessary, may be kept open, with cooling purgatives, in order to make some derivation from the blood-vessels of the head; the patient carefully avoiding all those circumstances which might either determine the blood to the head, or prevent its free return from it.

* Take Acidulated Infusion of Roses,	6 oz.	Make a draught, to be taken three or four times a-day.	
Nitrate of Potash,	1 drn.	† Take Powdered Alum,	2 drs.
Make a mixture; of which, take three table-spoonsful every three hours.		Rose Water,	6 oz.
		Distilled Vinegar,	1 oz.
		Make an injection.	
Take Diluted Sulphuric Acid,	24 drps.	or	
Water,	1½ oz.	Take Muriated Tincture of Iron,	1½ drn.
Syrup of Roses,	2 drs.	Distilled water,	6 oz.
Tincture of Opium,	15 drps.	Mix, and make an injection.	

If the genitals be immersed for some time in cold water, it will generally stop a bleeding at the nose. I have not known this fail.

Sometimes, when the bleeding is stopped outwardly, it continues inwardly. This is very troublesome, and requires particular attention, as the patient is apt to be suffocated with the blood, especially if he falls asleep, which he is very ready to do after losing a great quantity of blood.

When the patient is in danger of suffocation from the blood getting into his throat, the passages may be stopped by drawing threads up the nostrils, and bringing them out at the mouth, then fastening pieces of sponge, or small rolls of linen cloth to their extremities; afterwards drawing them back, and tying them on the outside with a sufficient degree of tightness.

After the bleeding is stopped, the patient ought to be kept as easy and quiet as possible. He should not pick his nose, nor take away the tentes or clotted blood till they fall off of their own accord, and should not lie with his head low.

Those who are affected with frequent bleeding at the nose, ought to bathe their feet often in warm water, and keep them warm and dry. They ought to wear nothing tight about their necks, to keep their body as much in an erect posture as possible, and never to view any object obliquely. If they have too much blood, a vegetable diet, with now and then a cooling purge, is the safest way to lessen it.

When bleeding at the nose occurs in adults of a full plethoric habit, a frequent use of cooling purgatives, and an antiphlogistic regimen, may probably prevent a return of the complaint. When occasioned by too great a determination of blood to the head, topical bleeding, by means of leeches applied to the temples, will be advisable. When it is occasioned by the suppression of some accustomed evacuation, such as the menstrual or hemorrhoidal flux, these are to be promoted, if possible, and should the attempt to restore them not succeed, some other discharge must be substituted, either by means of an issue or seton, &c.

But when the disease proceeds from a thin dissolved state of the blood, the diet should be rich and nourishing; as strong broths and jellies, sago-gruel with wine and sugar, &c. Infusion of the Peruvian bark in wine ought likewise to be taken, and persisted in for a considerable time.

BLEEDING AND BLIND PILES, (*Hæmorrhoids*.)

A DISCHARGE of blood from the hæmorrhoidal vessels is called the *bleeding piles*. When the vessels only swell, and discharge no blood, but are exceedingly painful, the disease is called the *blind piles*.

Persons of a loose spongy fibre, of a bulky size, who live high, and lead a sedentary, inactive life, are most subject to this disease. It is often owing to an hereditary disposition. Where this is the case, it attacks persons more early in life than when it is accidental. Men are more liable to it than women, especially those of a sanguine, plethoric, or a scorbutic habit, or of a melancholy disposition.

L

The piles may be occasioned by an excess of blood, by strong aloetic purges, high-seasoned food, drinking great quantities of sweet wines, the neglect of bleeding, or other customary evacuations, much riding, great costiveness, or any thing that occasions hard and difficult stools. Anger, grief, or other violent passions, will likewise occasion the piles. I have often known them brought on by sitting on the damp ground. A pair of thin breeches will excite the disorder in a person who is subject to it, and sometimes even in those who never had it before. Pregnant women are often afflicted with the piles.

A flux of blood from the *anus* is not always to be treated as a disease. It is even more salutary than bleeding at the nose, and often prevents or carries off diseases. It is peculiarly beneficial in the gout, rheumatism, asthma, and hypochondriacal complaints, and often proves critical in colics, and inflammatory fevers.

In the treatment of piles due attention should be paid to the cause from which they have arisen; and as costiveness is one of the most frequent, the bowels ought to be kept open and regular by means of gentle laxative medicines;* and as a habit may be acquired, the patient will do well to observe stated times in the day for endeavouring to obtain motions, but without straining. Should none be procured by the aid of the laxative medicine, the peristaltic motion may be excited by clysters of tepid water with soap and oil.

In the management of the patient, regard must be had to his habit of body, his age, strength, and manner of living. A discharge which might be excessive and prove hurtful to one, may be very moderate, and even salutary to another. That only is to be esteemed dangerous, which continues too long, and is in such quantity as to waste the patient's strength, hurt the digestion, nutrition, and other functions necessary to life.

When this is the case, the discharge must be checked by a proper regimen, and astringent medicines. The *DIET* must be cool but nourishing, consisting chiefly of bread, milk, cooling vegetables, and broths. The *DRINK* may be chalybeate water, orange-whey, decoctions or infusions of the astringent and mucilaginous plants, as the tormentil root, bistort, the marsh-mallow roots, &c.

Old conserve of red roses is very good medicine in this case. It may be mixed with new milk, and taken in the quantity of an ounce three or four times a-day. This medicine is in no great repute, owing to its being seldom taken in such quantity as to produce any effects; but when taken as here directed, and duly persisted in, I have known it perform very extraordinary cures in violent hæmorrhages, especially when assisted by the tincture of roses; a tea-cupful of which may be taken about an hour after every dose of the conserve.

* Take Lenitive Electuary, 2 oz.
Powdered Jalap, 2 drs.
Nitrate of Potash, 1½ drms.
Syrup of Buckthorn, enough to form an electuary. The bulk of a nutmeg to be taken occasionally.

Take Castor Oil, or 6 drs. to 1 oz.
or
Take Powdered Jalap, 1 scr.
Cream of Tartar, 2 scrs.
Make a powder for a dose.

The Peruvian bark is likewise proper in this case, both as a strengthener and astringent. Half a drachm of it may be taken in a glass of red wine, sharpened with a few drops of the elixir of vitriol, three or four times a-day.

The bleeding piles are sometimes periodical, and return regularly once a month, or once in three weeks. In this case they are always to be considered as a salutary discharge, and by no means to be stopped. Some have entirely ruined their health by stopping a periodical discharge of blood from the hæmorrhoidal veins.

In the *blind piles*, bleeding is generally of use. The diet must be light and thin, and the drink cool and diluting. It is likewise necessary that the body be kept gently open. This may be done by small doses of the flour of brimstone and cream of tartar.* These may be mixed in equal quantities, and a tea-spoonful taken two or three times a-day, or oftener if necessary. Or an ounce of the flour of brimstone and half an ounce of purified nitre, may be mixed with three or four ounces of the lenitive electuary, and a tea-spoonful of it taken three or four times a-day.

Emollient clysters are here likewise beneficial; but there is sometimes such an astriction of the *anus*, that they cannot be thrown up. In this case I have known a vomit have a very good effect.

When the piles are exceedingly painful and swelled, but discharge nothing, the patient must sit over the steam of warm water. He may likewise apply a linen cloth dipped in warm spirits of wine to the part, or poultices made of bread and milk, or of leeks fried with butter. If these do not produce a discharge, and the piles appear large, leeches must be applied as near them as possible, or if they will fix upon the piles themselves, so much the better. When leeches will not fix, the piles may be opened with a lance. The operation is very easy, and is attended with no danger.

Various ointments, and other external applications, are recommended in the piles; but I do not remember to have seen any effects from these worth mentioning. Their principal use is to keep the part moist, which may be done as well by a soft poultice, or an emollient cataplasm. When the pain, however, is very great, some anodyne liniment may be applied.†

Perhaps no other cause of the piles is so frequent as the use of aloetic purgatives. It is to be observed that aloes forms a considerable share of almost all advertised purging pills. A costive habit is more effectually, and much more safely removed, by a spoonful of castor oil taken occasionally in an evening.

When the piles are very painful, the best external application is a weak solution of sugar of lead with a little laudanum, or an ointment composed* of similar ingredients.‡ An ointment made of one-

* Take Sublimed Sulphur,	1 oz.	Opium, fine powdered,	1 drn.
Lenitive Electuary,	2 oz.	Make an ointment.	
Cream of Tartar,	3 drs.		
Syrup of Roses; enough to make the whole into an electuary. Dose, the size of a nutmeg occasionally.		† Take Spermaceti Ointment,	
		Cerate of Superacetate of Lead,	
		of each,	$\frac{1}{2}$ oz.
		Opium in Powder,	$\frac{1}{2}$ drn.
† Take Spermaceti Ointment,	2 oz.	Mix for an ointment.	

third finely powdered galls, and two-thirds hog's lard, is very useful. When the piles are seated high, relief may frequently be obtained from the injection of lime-water, or of an infusion of galls.

The pain of the piles is very often removed by an emetic, or by taking twice a-day thirty drops of balsam of copaiva on a little moist sugar. When a pile has a narrow neck, it is best extirpated by the knife. If the pile be large, or has a broad basis, a double ligature may be passed through it, and tied on each side.

When piles are neglected, they are very apt to produce a *fistula*. This complaint is discovered by a stain of matter on the linen, which, on examination, will be found to proceed from a small orifice in the neighbourhood of the anus. Various local remedies are recommended for this complaint. The utility of all of them depends on their power of stimulating the sides of the ulcer into more active inflammation, so as to make them cohere together. On this principle, I think I have seen advantage from taking a wine-glass of sea-water every night for a month or six weeks. Irritating injections have been used with similar intentions, and have sometimes, when duly persisted in, succeeded.

The only certain radical cure for a fistula is a surgical operation, the object of which is to reduce the ulcer to the state of a simple wound, and as such to heal it. This should never be too long neglected. The disease gradually diffuses itself in various directions through the cellular substance surrounding the rectum; and new openings are formed, which render the complaint more difficult to be removed.

There are two ways of performing the operation. One is by passing a silk thread, or piece of flexible gold wire in at the external orifice of the fistula, and bringing it out at the anus, and then twisting the ends together, which is daily repeated till it cuts its way out. By some timid people this mode of cure is preferred to the knife: and, though kept a secret by some pretenders to medical knowledge, it is as old as the history of surgery. The incision, however, is the more certain and effectual mode of eradicating the disease; and if suffering is to be estimated by duration, the less painful also.

SPITTING OF BLOOD. (*Hæmoptysis*.)

WE mean here to treat of that discharge of blood from the lungs only which is called an *hæmoptoe*, or *spitting of blood*. Persons of a slender make, and a lax fibre, who have long necks and strait breasts, are most liable to this disease. It is most common in the spring, and generally attacks people before they arrive at the prime or middle period of life. It is a common observation that those who have been subject to bleeding at the nose when young, are afterwards most liable to an *hæmoptoe*.

CAUSES.—An *hæmoptoe* may proceed from excess of blood, from a peculiar weakness of the lungs, or a bad conformation of the breast. It is often occasioned by excessive drinking, running, wrestling, singing, or speaking aloud. Such as have weak lungs ought to avoid all violent exertions of that organ, as they value

life. They should likewise guard against violent passions, excessive drinking, and every thing that occasions a rapid circulation of the blood.

This disease may likewise proceed from wounds of the lungs. These may either be received from without, or they may be occasioned by hard bodies getting into the wind-pipe, and so falling down upon the lungs, and hurting that tender organ. The obstruction of any customary evacuation may occasion a spitting of blood; as neglect of bleeding or purging at the usual seasons, the stoppage of the bleeding-piles in men, or the menses in women, &c. It may likewise proceed from a polypus, a scirrhus concretion, or any thing that obstructs the circulation of the blood in the lungs. It is often the effect of a long and violent cough; in which case it is generally the forerunner of a consumption. A violent degree of cold suddenly applied to the external part of the body will occasion an hæmoptoe. It may likewise be occasioned by breathing air which is too much rarified to be able properly to expand the lungs. This is often the case with those who work in hot places, as furnaces, glass-houses, or the like. It is likewise said to happen to such as ascend to the top of very high mountains, as the Peak of Teneriff, &c. It arises mostly between the age of sixteen and twenty-five.

Spitting of blood is not usually attended with danger, nor is it always to be considered as a primary disease. It is often only a symptom, and in some diseases not an unfavourable one. This is the case in pleurisies, peripneumonies, and sundry other fevers. In a dropsy, scurvy, or consumption, it is a bad symptom, and shows that the lungs are ulcerated.

SYMPTOMS.—Spitting of blood is generally preceded by a sense of weight, and oppression of the breast, a dry tickling cough, hoarseness, and a difficulty of breathing. Sometimes it is ushered in with shivering, coldness of the extremities, costiveness, great lassitude, flatulence, pain of the back and loins, &c. As these show a general stricture upon the vessels, and a tendency of the blood to inflammation, they are commonly the forerunners of a very copious discharge. The above symptoms do not attend a discharge of blood from the gums or fauces, by which means they may always be distinguished from an hæmoptoe. Sometimes the blood that is spit up is thin, and of a florid red colour; and at other times it is thick, and of a dark or blackish colour; nothing, however, can be inferred from this circumstance, but that the blood has lain a longer or shorter time in the breast before it was discharged.

Spitting of Blood, in a strong healthy person, of a sound constitution, is not very dangerous; but when it attacks the tender and delicate, or persons of a weak lax fibre, it is with difficulty removed. When it proceeds from a scirrhus or polypus of the lungs, it is bad. The danger is greater when the discharge proceeds from the rupture of a large vessel, than of a small one. When the extravasated blood is not spit up, but lodges in the breast, it corrupts, and greatly increases the danger. When the blood proceeds from an ulcer in the lungs, it is generally fatal.

REGIMEN.—The patient ought to be kept cool and easy. Every thing that heats the blood, or quickens the circulation, increases the danger. The mind ought likewise to be soothed, and every occasion of exciting the passions avoided. The diet should be soft, cooling and slender; as rice boiled with milk, small broths, barley-gruels, panado, &c. The diet, in this case, can scarcely be too low. Even water-gruel is sufficient to support the patient for some days. All strong liquors must be avoided. The patient may drink milk and water, barley-water, whey, butter-milk and such like. Every thing, however, should be drank cold, and in small quantities at a time. He should observe the strictest silence, or at least speak with a very low voice.

MEDICINE.—This, like the other involuntary discharges of blood, ought not to be suddenly stopped by astringent medicines. More mischief is often done by these, than if it were suffered to go on. It may, however, proceed so far as to weaken the patient, and even endanger his life; in which case proper means must be used for restraining it.

The body should be kept gently open by laxative diet; as roasted apples, stewed prunes, and such like. If these should not have the desired effect, a tea-spoonful of the lenitive electuary may be taken twice or thrice a-day, as is found necessary. If the bleeding proves violent, ligatures may be applied to the extremities, as directed for a bleeding at the nose; cooling purgatives,* such as manna, tamarinds, phosphorated soda, sulphate of potash, &c. refrigerants, &c.†

If the patient be hot or feverish, bleeding and small doses of nitre will be of use; a scruple or half a drachm of nitre may be taken in a cup of his ordinary drink twice or thrice a-day. His drink may likewise be sharpened with acids, as juice of lemon, or a few drops of sulphuric acid, sufficiently diluted with water; or he may take frequently a cup of the tincture of roses.

Bathing the feet and legs in lukewarm water has likewise a very good effect in this disease. Opiates, too, are sometimes beneficial; but these must be administered with caution. Ten or twelve drops of laudanum may be given in a cup of barley-water twice a-day, and continued for some time, provided they be found beneficial.

The conserve of roses is likewise a very good medicine in this case, provided it be taken in sufficient quantity, and long enough persisted in. It may be taken to the quantity of three or four ounces a-day; and, if the patient be troubled with a cough, it should be made into an electuary with balsamic syrup, and a little of the syrup of poppies, or a bolus may be given in the form below.‡

* Take infusion of Roses,	1½ oz.	Purified Nitre,	2 drs.
Epsom Salts,	3 drs.	Make four powders: one to be taken every	
Make a draught; to be taken twice a-day.		fourth hour.	
† Take Infusion of Roses,	1½ oz.	‡ Take Powdered Alum,	8 grs.
Nitre,	15 grs.	Extract of Catechu,	10 grs.
Tincture of Opium,	10 drps.	Conserve of Roses, sufficient to	
Make a draught; to be taken every fourth		make a bolus.	
hour.		To be taken every four hours, washing it	
		down with three table-spoonful of the	
		infusion of roses.	

If stronger astringents be necessary, fifteen or twenty drops of sulphuric acid may be given in a glass of water, three or four times a-day.

Those who are subject to frequent returns of this disease should avoid all excess. Their diet should be light and cool, consisting chiefly of milk and vegetables. Above all, let them beware of vigorous efforts of the body, and violent agitations of the mind.*

VOMITING OF BLOOD. (*Hæmatemesis.*)

This is not so common as the other discharges of blood which have already been mentioned; but it is very dangerous, and requires particular attention.

Vomiting of blood is generally preceded by pain of the stomach, sickness, and nausea; and is accompanied with great anxiety, and frequent fainting fits.

This disease is sometimes periodical; in which case it is less dangerous. It often proceeds from an obstruction of the menses in women, and sometimes from the stoppage of the hæmorrhoidal flux in men. It may be occasioned by any thing that greatly stimulates or wounds the stomach, as strong vomits or purges, acrid poison, sharp or hard substances taken into the stomach, &c. It is often the effect of obstructions in the liver, the spleen, or some of the other viscera. It may likewise proceed from external violence, as blows or bruises, or from any of the causes which produce inflammation. In hysteric women, vomiting of blood is a very common, but by no means a dangerous symptom.

A great part of the danger in this disease arises from the extravasated blood lodging in the bowels, and becoming putrid, by which means a dysentery or putrid fever may be occasioned. The best way of preventing this, is to keep the body gently open, by frequently exhibiting emollient clysters. Purges must not be given till the discharge is stopped, otherwise they will irritate the stomach, and increase the disorder. All the food and drink must be of a mild cooling nature, and taken in small quantities. Even drinking cold water has sometimes proved a remedy, but it will succeed better when sharpened with the weak spirits of vitriol. When there are signs of an inflammation, bleeding may be necessary; but the patient's weakness will seldom permit it. Opiates may be

*Dr. Rush of Philadelphia has published some interesting facts concerning the utility of common salt, in curing hæmorrhage from the lungs. As this remedy may be obtained every where without difficulty, its effects ought to be made generally known. The following are the Doctor's own words.

"The mode of giving it, is to pour down from a tea to a table-spoonful of clean fine salt, as soon as possible after the hæmorrhage begins from the lungs. This quantity generally stops it; but the dose must be repeated daily for three or four days, to prevent a return of the disorder. If the bleeding continues, the salt must be continued till it is checked, but in larger doses. I have heard of several instances in which two table-spoonful were taken at one time for several days.

"It sometimes excites a sickness at the stomach, and never fails to produce a burning sensation in the throat in its passage into the stomach, and considerable thirst afterwards.

"I have found this remedy to succeed equally well in hæmorrhages, whether they were active or passive, or whether they occurred in young or in old people.—MEDICAL INQUIRIES, &c. vol. i. Ed.

of use; but they must be given in very small doses, as four or five drops of liquid laudanum twice or thrice a-day.*

After the discharge is over, as the patient is generally troubled with gripes, occasioned by the acrimony of the blood lodged in the intestines, gentle purges of Epsom salts, tartarized soda, &c. may be given in the almond mixture; and infusion of roses and sulphuric acid should be given regularly every six hours.†

BLOODY URINE. (*Hæmaturia*.)

This is a discharge of blood from the vessels of the kidneys or bladder, occasioned by their being either enlarged, broken, or eroded. It is more or less dangerous according to the different circumstances which attend it.

When pure blood is voided suddenly, without interruption and without pain, it proceeds from the kidneys; but if the blood be in small quantity, of a dark colour, and emitted with heat and pain about the bottom of the belly, it proceeds from the bladder. When bloody urine is occasioned by a rough stone descending from the kidneys to the bladder, which wounds the *ureter*, it is attended with a sharp pain in the back, and difficulty of making water. If the coats of the bladder are hurt by a stone, and the bloody urine follows, it is attended with the most acute pain, and a previous stoppage of urine.

Bloody urine may likewise be occasioned by falls, blows, the lifting or carrying of heavy burdens, hard riding, or any violent motion. It may also proceed from ulcers of the bladder, from a stone lodged in the kidneys, or from violent purges, or sharp diuretic medicines, especially cantharides.

Bloody urine is always attended with some degree of danger; but it is peculiarly so when mixed with purulent matter, as this shows an ulcer somewhere in the urinary passages. Sometimes this discharge proceeds from excess of blood, in which case it is rather to be considered as a salutary evacuation than a disease. If the disease, however, be very great, it may waste the patient's strength, and occasion an ill habit of body, a dropsy, or a consumption.

The treatment of this disorder must be varied according to the different causes from which it proceeds.

When it is owing to a stone in the bladder, the cure depends upon an operation, a description of which would be foreign to our purpose.

If it be attended with a plethora, and symptoms of inflammation, bleeding will be necessary. The body must likewise be kept open by emollient clysters, or cooling purgative medicines; as cream of tartar, rhubarb, manna, or small doses of lenitive electuary.

When bloody urine proceeds from a dissolved state of the blood,

* Take Infusion of Roses,	1½ oz.	Tincture of Opium,	10 drps.
Diluted Sulphuric Acid,	10 drps.	Make a draught; to be taken every one or	
Syrup of Roses,	1 drn.	two hours.	

† Vomiting of blood may frequently be cured by the administration of an active purgative, as ten or fifteen grains of the stomach-pill at bed-time for three or four nights successively. *Ed.*

it is commonly the symptom of some malignant disease; as the small-pox, a putrid fever, or the like. In this case the patient's life depends on the liberal use of the Peruvian bark, wine, and acids, as has already been shown.*

When there is reason to suspect an ulcer in the kidneys or bladder, the patient's diet must be cool, and his drink of a demulcent, healing, balsamic quality, as decoctions of marsh-mallow roots with liquorice, solutions of gum-arabic, &c. Three ounces of marsh-mallow roots, and half an ounce of liquorice, may be boiled in two English quarts of water to one; two ounces of gum-arabic, and half an ounce of purified nitre, may be dissolved in the strained liquor, and a tea-cupful of it taken four or five times a-day.

The early use of astringents in this disease has often bad consequences. When the flux is stopped too soon, the grumous blood, by being confined in the vessels, may produce inflammations, abscess, and ulcers. If, however, the case be urgent, or the patient seems to suffer from the loss of blood, gentle astringents may be necessary. In this case the patient may take three or four ounces of lime-water, with half an ounce of the tincture of Peruvian bark, three times a-day; or he may take an ounce or two of the conserve of roses three or four times a-day, drinking a tea-cupful of the tincture of roses after it; or, if stronger styptics be necessary, a dram of Armenian bole in a cup of whey may be taken three or four times a-day, or the annexed.†

DYSENTERY, OR BLOODY FLUX. (*Dysenteria.*)

This disease prevails in the spring and autumn. It is most common in marshy counties, where, after hot and dry summers, it is apt to become epidemic. Persons are most liable to it who are much exposed to the night air, or who live in places where the air is confined and unwholesome. Hence it often proves fatal in camps, on shipboard, in jails, hospitals, and such like places.

CAUSES.—The dysentery may be occasioned by any thing that obstructs the perspiration, or renders the humours putrid; as damp beds, wet clothes, unwholesome diet, bad air, &c. But it is most frequently communicated by infection. This ought to make people extremely cautious in going near such persons as labour under the disease. Even the smell of the patient's excrements has been known to communicate the infection.

SYMPTOMS.—It is known by a flux of the belly, attended by violent pain of the bowels, tenesmus, or a constant inclination to go to stool, and generally more or less blood in the stools. It begins, like other fevers, with chillness, loss of strength, a quick pulse, great thirst, and an inclination to vomit. The stools are at first

* Take Confection of Red Roses, 1 oz.
Infusion of Roses, Warm, 1 pint.
Macerate for half an hour, and strain.

Make a mixture; to be taken three times a-day.

or
Take of this Strained Liquor, 13 drs.
Diluted Sulphuric Acid, 10 drps.

† Take Purified Alum, $\frac{1}{2}$ scr.
Kino in Powder, 5 grs.
Make a powder; to be taken three times a-day.

greasy and frothy, afterwards they are streaked with blood, and at last have frequently the appearance of pure blood, mixed with small filaments resembling bits of skin. Worms are sometimes passed both upwards and downwards, through the whole course of the disease. When the patient goes to stool, he feels a bearing down, as if the whole bowels were falling out, and sometimes a part of the intestine is actually protruded, which proves exceedingly troublesome, especially in children. Flatulency is likewise a troublesome symptom, especially towards the end of the disease.

This disease may be distinguished from a diarrhœa, or looseness, by the acute pain of the bowels, and the blood which generally appears in the stools. It may be distinguished from the *cholera morbus* by its not being attended with such violent and frequent fits of vomiting, &c.

When the dysentery attacks the old, the delicate, or such as have been wasted by the gout, the scurvy, or other lingering diseases, it generally proves fatal. Vomiting and hiccuping are bad signs, as they show an inflammation of the stomach. When the stools are green, black, or have an exceedingly disagreeable cadaverous smell, the danger is very great, as it shows the disease to be of the putrid kind. It is an unfavourable symptom when clysters are immediately returned; but still more so when the passage is so obstinately shut that they cannot be injected. A feeble pulse, coldness of the extremities, with difficulty of swallowing, and convulsions, are signs of approaching death.

REGIMEN.—Nothing is of more importance in this disease than cleanliness. It contributes greatly to the recovery of the patient, and no less to the safety of such as attend him. In all contagious diseases the danger is increased, and the infection spread, by the neglect of cleanliness, but in no one more than in this. Every thing about the patient should be frequently changed. The excrements should never be suffered to continue in his chamber, but removed immediately, and buried under ground. A constant stream of fresh air should be admitted into the chamber, and it ought frequently to be sprinkled with vinegar, juice of lemon, or some other strong acids.

The patient must not be discouraged, but his spirits kept up in hopes of a cure. Nothing tends more to render any putrid disease mortal than the fears and apprehensions of the sick. All diseases of this nature have a tendency to sink and depress the spirits, and when that is increased by fears and alarms from those whom the patient believes to be persons of skill, it cannot fail to have the worst effect.

A flannel waistcoat worn next the skin has often a very good effect in the dysentery. This promotes the perspiration, without overheating the body. Great caution, however, is necessary, in leaving it off. I have often known a dysentery brought on by imprudently throwing off a flannel waistcoat before the season was sufficiently warm. For whatever purpose this piece of dress is worn, it should never be left off but in a warm season.

In this disease the greatest attention must be paid to the patient's diet; flesh, fish, and every thing that has a tendency to turn putrid

or rancid on the stomach, must be abstained from. Apples boiled in milk, water-pap, and plain light pudding, with broth made of the gelatinous parts of animals, may constitute the principal part of the patient's food. Gelatinous broth not only answers the purpose of food, but likewise a medicine. I have often known dysenteries, which were not of a putrid nature, cured by it, after pompous medicines had proved ineffectual.*

Another kind of food very proper in the dysentery, which may be used by such as cannot take the broth mentioned above, is made by boiling a few handfuls of fine flour, tied in a cloth, for six or seven hours, till it becomes as hard as starch. Two or three table-spoonsful of this may be grated down, and boiled in such a quantity of new milk and water as to be of the thickness of pap. This may be sweetened to the patient's taste, and taken for his ordinary food.†

In a *putrid dysentery* the patient may be allowed to eat freely of most kinds of good ripe fruit: as apples, grapes, gooseberries, currant-berries, strawberries, &c. These may either be eaten raw or boiled, with or without milk, as the patient chooses. The prejudice against fruit in this disease is so great, that many believe it to be the common cause of dysenteries. This, however, is an egregious mistake. Both reason and experience show, that good fruit is one of the best medicines, both for the prevention and cure of the dysentery. Good fruit is in every respect calculated to counteract that tendency to putrefaction, from whence the most dangerous kind of dysentery proceeds. The patient in such a case ought, therefore, to be allowed to eat as much fruit as he pleases, provided it be ripe.‡

* The manner of making this broth is, to take a sheep's head and feet, with the skin upon them, and to burn the wool off with a hot iron; afterwards to boil them till the broth is quite a jelly. A little cinnamon or mace may be added, to give the broth an agreeable flavour, and the patient may take a little of it warm, with toasted bread, three or four times a-day. A clyster of it may likewise be given twice a-day. Such as cannot use broth made in this way, may have the head and feet skinned; but we have reason to believe that this injures the medicine. It is not our business here to reason upon the nature and qualities of medicine, otherwise this might be shown to possess virtues every way suited to the cure of a dysentery which does not proceed from a putrid state of the humours. One thing we know, which is preferable to all reasoning, that whole families have often been cured by it, after they had used many other medicines in vain. It will, however, be proper that the patient take a vomit, and a dose or two of rhubarb, before he begins to use the broth. It will likewise be necessary to continue the use of it for a considerable time, and to make it the principal food.

† The learned and humane Dr. Rutherford, late professor of medicine in the university of Edinburgh, used to mention this food in his public lectures with great encomiums. He directed it to be made by tying a pound or two of the finest flour, as tight as possible, in a linen rag, afterwards to dip it frequently in water, and to dridge the outside with flour till a cake or crust was formed around it, which prevents the water from soaking into it while boiling. It is then to be boiled till it becomes a hard dry-mass, as directed above. This, when mixed with milk and water, will not only answer the purpose of food, but may likewise be given in clysters.

‡ I lately saw a young man who had been seized with a dysentery in North America. Many things had been tried there for his relief, but to no purpose. At length, tired out with disappointments from medicine, and reduced to skin and bone, he came over to Britain, rather with a view to die among his relations, than with any hopes of a cure. After taking sundry medicines here with no better success than abroad, I advised him to leave off the use of drugs, and to trust entirely to a diet of milk and fruits, with gentle exercise. Strawberries was the only fruit he could procure at that season. These he ate with milk twice, and sometimes thrice a-day. The consequence was, that in a short time his stools were reduced from upwards of twenty in a-day, to three

The most proper drink in this disorder is whey. The dysentery has often been cured by the use of clear whey alone. It may be taken both for drink, and in form of clyster. When whey cannot be had, barley-water sharpened with cream of tartar may be drank, or a decoction of barley and tamarinds; two ounces of the former and one of the latter may be boiled in two English quarts of water to one. Warm water, water-gruel, or water wherein hot iron has been frequently quenched, are all very proper, and may be drank in turns. Camomile-tea, if the stomach will bear it, is an exceedingly proper drink. It both strengthens the stomach, and by its antiseptic quality tends to prevent a mortification of the bowels.

MEDICINE.—At the beginning of this disease it is always necessary to cleanse the first passages. For this purpose an emetic ipecacuanha must be given, and wrought off with weak camomile tea. Strong vomits are seldom necessary here. A scruple, or at most half a drachm of ipecacuanha, is generally sufficient for an adult, and sometimes a very few grains will suffice. The day after the vomit, half a drachm or two scruples of rhubarb must be taken; or, what will answer the purpose rather better, an ounce, or an ounce and a half, of Epsom salts.* This dose may be repeated every other day for two or three times. Afterwards small doses of ipecacuanha may be taken for some time. Two or three grains of the powder may be mixed in a table-spoonful of the syrup of poppies, and taken three times a-day.

Should the medicines here prescribed not procure copious stools, stronger purgatives must then be employed.† Some practitioners are in the habit of combining emetic and purgative medicines; such as some of the mild neutral salts with tartarized, and often with very good effect.‡

These evacuations, and the regimen prescribed above, will often be sufficient to effect a cure. Should it, however, happen otherwise, the following astringent medicines may be used:—

A clyster of starch or fat mutton-broth, with thirty or forty drops of liquid laudanum in it, may be administered twice a-day. At the same time an ounce of gum-arabic, and half an ounce of gum-tragacanth, may be dissolved in an English pint of barley-water, over a slow fire, and a table spoonful of it taken every hour.

If these have not the desired effect, the patient may take, four times a-day, about the bulk of a nutmeg of the extract of catechu, drinking after it a tea-cupful of the decoction of logwood.

or four, and sometimes not so many. He used the other fruits as they came in, and was in a few weeks so well as to leave that part of the country where I was, with a view to return to America.

- | | | | |
|---|---------------------|---|--------|
| * Take Epsom Salts, | 1 oz. | Jalap, | 1 scr. |
| Manna, | $\frac{1}{2}$ oz. | Syrup of Buckthorn, enough to form the | |
| Warm Water, | | mass into five pills for a dose. | |
| Peppermint Water, | | | |
| of each, | 2 $\frac{1}{2}$ oz. | † Take Infusion of Senna, | 5 oz. |
| Dose, four table-spoonful occasionally. | | Tartrate of Potash, | 1 oz. |
| or | | Tartarized Antimony, | 2 grs. |
| Take Castor Oil, 1 oz. for a dose. | | Make a mixture, of which take four table- | |
| | | spoonful every three hours, until the | |
| † Take Submuriate of Mercury, | 3 grs. | bowels are sufficiently moved. | |

The astringents best adapted for the cure of a dysentery are the different preparations of catechu, gum kino, logwood, &c., which may be given as below,* the patient at the same time taking port wine properly diluted with water for his ordinary drink. Lime-water mixed with an equal quantity of milk has been recommended as a useful remedy towards the latter end of the disease.

In the advanced and chronic state of the disease, at which time acidity of the stomach is apt to prevail, absorbents, as the chalk mixture, compound powder of chalk, lime-water, &c. conjoined with opiates, will be serviceable.

Persons who have been cured of this disease are very liable to relapse; to prevent which, great circumspection with respect to diet is necessary. The patient must abstain from all fermented liquors, except now and then a glass of good wine; but he must drink no kind of malt liquor. He should likewise abstain from animal food, as fish and flesh, and live principally on milk and vegetables.

Gentle exercise and wholesome air are likewise of importance. The patient should go to the country as soon as his strength will permit, and should take exercise daily on horseback, or in a carriage. He may likewise use bitters infused in wine or brandy, and may drink twice a-day a gill of lime-water mixed with an equal quantity of new milk.

When dysenteries prevail, we would recommend a strict attention to cleanliness, a spare use of animal food, and the free use of sound ripe fruits, and other vegetables. The night air is to be carefully avoided, and all communication with the sick. Bad smells are likewise to be shunned, especially those which arise from putrid animal substances. The necessities where the sick go are carefully to be avoided.

There are various other fluxes of the belly, as the LIENTERY and CÆLIAC PASSION, which, though less dangerous than the dysentery, yet merit consideration. These diseases generally proceed from a relaxed state of the stomach and intestines, which is sometimes so great, that the food passes through them with hardly any sensible alteration; and the patient dies merely from the want of nourishment.

When the lientery or cæliac passion succeeds to a dysentery, the case is bad. They are always dangerous in old age, especially when the constitution has been broken by excess or acute diseases. If the stools be very frequent and quite crude, the thirst great, with little urine, the mouth ulcerated, and the face marked with spots of different colours, the danger is very great.

The treatment of the patient is in general the same as in the

* Take Extract of Logwood,	3 drs.	Spirit of Nutmegs,	1 oz.
Water,	7 oz.	Mix.—Dose, three table-spoonsful or more	
Spirit of Cinnamon,	1 oz.	every hour.	
Tincture of Catechu,	2 drs.	or	
Mix, and give two table-spoonsful every		Take Extract of Catechu,	15 grs.
four hours.		Pimenta Water,	1½ oz.
or		Tincture of Kino,	1 drm.
Take Extract of Logwood,	1 drm.	——— of Opium,	10 drps.
Chalk Mixture,	4 oz.	Make a draught to be taken every four	
Tincture of Catechu,	2 drs.	hours.	

dysentery. In all obstinate fluxes of the belly, the cure must be attempted, by first cleansing the stomach and bowels with gentle vomits and purges; afterwards such a diet as has a tendency to heal and strengthen the bowels, with opiates and astringent medicines, will generally complete the cure.

The same observation holds with respect to a TENESMUS, or frequent desire of going to stool. This disease resembles the dysentery so much, both in its symptoms and method of cure, that we think it needless to insist upon it.

CHAP. XXVI.

HEAD-ACH. (*Cephalalgia*.)

ACHES and pains proceed from very different causes, and may affect any part of the body; but we shall point out those only which occur most frequently, and are attended with the greatest danger.

When the head-ach is slight, and affects a particular part of the head only, it is called *cephalgia*; when the whole head is affected, *cephalea*; and when one side only, *hemicrania*. A fixed pain in the forehead, which may be covered with the end of the thumb, is called the *clavis hystericus*.

There are also other distinctions. Sometimes the pain is internal, sometimes external; sometimes it is an original disease, and at other times only symptomatic. When the head-ach proceeds from a hot bilious habit, the pain is very acute and throbbing, with a considerable heat of the part affected. When from a cold phlegmatic habit, the patient complains of a dull heavy pain, and has a sense of coldness in the part. This kind of head-ach is sometimes attended with a degree of stupidity or folly.

CAUSES.—Whatever obstructs the free circulation of the blood through the vessels of the head, may occasion a head-ach. In persons of a full habit, who abound with blood, the head-ach often proceeds from the suppression of customary evacuations; as bleeding at the nose, sweating of the feet, &c. It may likewise proceed from any cause that determines a great flux of blood towards the head; as coldness of the extremities, or hanging down the head for a long time. Whatever prevents the return of the blood from the head, will likewise occasion a head-ach; as looking long obliquely at any object, wearing any thing tight about the neck, a new hat, or the like.

When a head-ach proceeds from the stoppage of a running at the nose, there is a heavy, obtuse, pressing pain in the fore-part of the head, in which there seems to be such a weight, that the patient can scarcely hold it up. When it is occasioned by the caustic matter of the venereal disease, it generally affects the skull, and often produces a *caries* of the bones.

Sometimes the head-ach proceeds from the repulsion or retrocession of the gout, the erysipelas, the small-pox, measles, itch, or