

The causes of scrofula are, chiefly, *hereditary transmission*, and *deprivation of pure air*. The former is well known to all. Baude-locque, McCormick, and Greenhow, among others, have proved the latter most thoroughly. All depression of the system by low living, such as insufficiency of food and warmth, dampness, etc., will promote it. It has been imagined, not proved, that the syphilitic taint of constitution may glide into it.

In *treatment* of scrofula, in any of its forms, but particularly in chronic enlargements, with or without cheesy softening, of the lymphatic glands (of the neck, armpit, or groin), iodine has general confidence [F. 176]. It is not, however, infallible. Iodide of ammonium (dose $\frac{3}{4}$ grains) is now coming under trial. *Iodized milk* (Hagar) is said to be very available; one part of iodine dissolved in ten parts of alcohol, and mixed with ninety parts of fresh, warm cow's milk.¹ The external application of iodine to tumors, scrofulous or other, "to produce absorption," will very frequently disappoint. I am not sure that it has, locally, any effect but as a stimulant or irritant. That may sometimes be useful. Mr. Furneaux Jordan asserts² that *counter-irritation* by iodine, applied a short distance from the enlarged glands, as at the back of the neck, has, in his hands, never failed to be followed by their reduction.

Dr. J. Lewis Smith advises the application to the enlarged glands of a rather weak ointment of iodine, to allow *absorption* without irritation. Mr. Henry Power, of St. Bartholomew's Hospital, London, has found extract of belladonna, internally, and the local application of atropia, important remedies in strumous *ophthalmia*, in children.

Cod-liver oil is also an anti-strumous remedy of great power; and one more readily taken by the young than by adults, generally. Iron may be serviceable in many debilitated scrofulous cases. Sea bathing and sea air are among the best of remedies. Good diet is indispensable. The *dietetic salt* of Dr. Lankester, prepared by adding to common salt small quantities of phosphoric acid, sulphuric acid, lime, potassium, and iron, may have some advantages, and is worthy of trial. The same may be said of *ferruginous chocolate*.

The *local* treatment of so-called scrofulous affections is to a great extent surgical. Slowly softening glands may sometimes be cut out. Scrofulous periostitis, threatening caries, I have seen arrested by free application of *cerate of carbonate of lead*

scrofula. "Hodgkin observed it first in the mesenteric glands, but any or all may be affected. In it the glands become very much enlarged, even to the size of an egg, and apparently more numerous; they present a smooth external appearance, and have a soft semi-fluctuating elastic feel. On section the surface of the gland presents a smooth, bloodless, semi-transparent, loose, succulent structure; microscopically it is made up of glandular tissue and abundance of fibro-nucleated tissue; it is of a tough leathery consistence, and exudes a clear serous fluid; the tumors are always free, each being separable from the others." (Bryant's Surgery.)

Mycosis is a name given by some pathologists (Malassez, Gilot, Landouzy) to an affection of the glands of a similar nature to this. See a case reported by Debove; *Le Mouvement Médical*, Oct. 1872.

¹ Medical Press and Circular, Jan. 15, 1871.

² Med. Times and Gaz., Aug. 20, 1870.

over the affected bone. The legs are most frequently the seat of such disease; but it may attack any of the long bones. Removal of diseased or necrosed portions is to be recommended rarely, unless they are *loosened*. Extensive resections should be very exceptional.

RICKETS.

Synonym.—*Rachitis*. Infants upon learning to walk show the cachexia to which this name is given, by yielding of the bones, with muscular debility, and general failure of nutrition. The bones are brittle from imperfect development; the spine is apt to become curved, and the limbs crooked. The teeth are backward in coming, and fall out with early decay. Tenderness of the surface of the body, and irritability of the nervous system, also exist.

Dr. C. C. Ritchie¹ has shown that an important diagnostic sign between rickets and tuberculous disease is, that the increase of temperature, especially in the evening, common in tuberculosis, is absent in rickets.

Rachitis does not appear to be hereditary. Its most frequent cause is *insufficient or unsuitable food*.²

Treatment.—*Hygienic* measures are of the first consequence. Well-aired rooms, warm salt bathing, milk or beef-tea diet, cod-liver oil, iron, and phosphate, lacto-phosphate³ [F. 257], or hypophosphite of calcium, all have their value.

CARIES OF THE SPINE.

Synonym.—*Pott's Disease*.

In scrofulous children of either sex, between two and fifteen years of age, sometimes without, but oftener after, a fall, blow, or other mechanical injury, caries of the body of one, or occasionally two or three of the vertebræ may occur. The *dorsal* region is most frequently attacked.

Symptoms.—Pallor, debility, pain in the abdomen,⁴ in sudden and severe paroxysms; irritability of temper, stooping forward in walking, rigidity of muscles, a cautious, gliding gait, to avoid concussion of the spine; loss of appetite, swelling of the belly, uneasy sleep, hurried or impeded respiration; tenderness of the spine on pressure; an *angular deformity* or backward projection of a portion of the spine; paralysis in various degrees, abscesses of the back, discharging externally or by the lungs, bowels, vagina; or, the pus entering the hip-joint.

Treatment.—Dr. Henry G. Davis,⁵ of New York, claims, and I believe with reason, to have introduced an important improvement into the treatment of caries of the spine. Of the older

¹ Med. Times and Gaz., Jan. 7, 1871.

² See an elaborate paper by Dr. J. S. Parry, Am. Journal of Medical Sciences, 1872.

³ Dusart and Blache, Bull. Gén. de Thérapeutique, July 30, 1868; also, a paper by Dr. B. W. McCready, New York Med. Journal, June, 1871.

⁴ Dr. B. Lee (Angular Curvature of the Spine, 1867) speaks of "gastralgia" as an *initial symptom*.

⁵ *Conservative Surgery*, 1867. Dr. Davis's first publication on the subject was in the Boston Medical and Surgical Journal, August, 1852.

methods, the best idea was *rest* to the back, with careful efforts at extension; and, especially in this country by the late Dr. John K. Mitchell, support (by means of corsets) dependent upon attachments quite outside of the body. Dr. Davis, reasoning upon the fact that the *bodies* of the vertebræ are the seats of the destructive process, aims at *separating* these, throwing all the weight upon the oblique processes. The spine is relieved then by *strengthening* rather than extending it.

An apparatus of Dr. C. F. Taylor carries out this and other rational principles of treatment very well. It is thus described: "A broad band passes around the trunk low down, so low that in front it almost touches the thighs in sitting. It passes just above the pubes and entirely below the abdomen, so that the abdomen is sustained upward, instead of being, as in most instruments, pressed downward. There are two pieces or levers passing up the back, not over the spine, but each side of it, so that it is firmly held from lateral deviations. At the top is a cross-piece in the form of two T's with the small ends united. The object of this arrangement is that the straps may pass directly forward and around the arms, and thus prevent a great loss of force by diagonal action; and also that they shall touch the person only where the pressure is needed, namely, on the forward part of the shoulders. At a part of the instrument opposite the seat of the disease, the point where we make our fulcrum, the pads are placed. These are made of chamois skin or Canton flannel, and are filled, not with cotton, which soon packs and becomes hard, but with long, elastic African or East Indian wool, which has no felting qualities. These pads are removable when they become compacted. The shoulder-straps and bands around the hips are likewise provided with removable pads to protect the skin against pressure and abrasion.

"It will be seen that the instrument, like the spine itself, acts like a double lever with a common fulcrum at the curvature; this action is directly backward at the hips and shoulders, and directly forward at the middle of the back, or wherever the diseased part is located. . . . The instrument is provided with several hinges, *stop* hinges in *front*, but free to bend *backwards*, which allows the most unrestrained use of the muscles of the back . . . useful in causing the development of the spinal muscles instead of binding them up and causing their atrophy, as results from the use of instruments which prevent muscular action."

Constitutional treatment, by fresh air and sunshine, nourishing diet and cod-liver oil, iron, or other tonics, as well as purgatives (if required, as they are in most cases) must be added, of course, to mechanical means. Cures are thus sometimes effected in cases once thought hopeless.

Lateral curvature of the spine is very different, mostly depending upon muscular weakness or inequality of development. Bad habitual positions often cause it. Training the subject of it to *use his muscles properly*, and thus develop and strengthen them, must be the leading idea in its treatment, apparatus here being quite secondary, though perhaps sometimes temporarily needful.

¹ Angular Curvature of the Spine, by Dr. B. Lee, p. 70.

COXALGIA.

Synonyms.—*Morbus Coxarius; Hip-Disease.*

Though regarded, like spinal caries, as rather a "surgical" subject, a few words may not be out of place upon this theme also. Its *etiology* appears to be like that of disease of the spine; a constitutional tendency, tubercular or scrofulous, acted upon in many, though far from all cases, by a local injury. Inflammation of the hip-joint occurs, in some instances acute and violent, oftener active only at first and to a moderate degree; not rarely insidious in approach.

Symptoms of the most characteristic kind are, pain in the knee, without any other sign of disease about that part; and a limping gait, the knee being bent, the child treading only on the toe of the affected limb. Examining the hip-joint, it is found that pressing the head of the thigh-bone into it gives pain. Atrophy of the muscles over the hip may follow. General weakness and emaciation, with other symptoms of the scrofulous cachexia, usually attend. *Suppuration* in the joint, with chronic abscesses, ulceration of the cartilages, subluxation of the femur, and caries of the bones, with hectic fever and progressive debility, occur in severe cases.

Treatment.—Physick's celebrated treatment was, absolute rest of the joint by means of a carved splint, passive exercise in the open air, in a carriage, or, if a young child, in arms—and systematic purgation with jalap and cream of tartar. To this, with less stress upon the not at all indispensable purging, Dr. H. G. Davis has added the use of *continued elastic extension* of the limb, so as to relieve the joint of the pressure of the head of the bone in its socket, caused by the contraction of the muscles. This continued elastic extension may be obtained in bed, by adhesive plaster strips, to which is suspended, by a cord and pulley, a *weight*, proportioned to the amount of power which the muscles display, and tested by the comfort secured by it to the patient. Out of bed, a splint may be applied, maintaining elastic extension by a perineal band, best made of adhesive plaster, spread (as proposed by Dr. Davis) upon *twilled* material, and kept for a while before use, so as to lose its unctuous property and remain more securely in place.

Simple inflammation of the hip-joint may, of course, follow an injury; and may find relief in a comparatively brief time, from rest, with local antiphlogistic measures, as cups, a blister, etc.

ANÆMIA.

Something has been said upon this subject under *General Pathology*.

The **causes** of anæmia are, most often, either, 1. Loss of blood, from disease or injury causing hemorrhage. 2. Excessive suckling in a mother, or wet-nurse. 3. Severe or protracted diarrhoea, or (more rarely) leucorrhœa. 4. Typhoid or some other form of fever. 5. The malarial influence, sustained for a considerable time. 6. Deficiency of food, light, warmth, or fresh air.

Anæmic symptoms are pallor, slenderness of figure, debility, nervous excitability, cardiac palpitation. Anæmic *murmurs* in the heart and aorta have been mentioned under *Semeiology*.

In the treatment of anæmia, *good diet, pure air, and iron or cod-liver oil* are the essentials. Of the preparations of iron, numerous as they are, I have found the most satisfactory results from the tincture of the chloride, the pill of the carbonate (Valleix's mass), the iodide (syrupus ferri iodidi), the phosphate, and in children, the citrate [F. 202, 203, 204, 205]. Dr. Aitken speaks very highly of the value of a combination designated as the "syrup of the phosphates of iron, quinine, and strychnia." This formula will be given at the end of the book [see F. 213].

CHLOROSIS.

This not very common affection of girls, about the age of puberty, is by some regarded as simple anæmia; by others as a pathologically distinct affection. Symptomatically, it is characterized by a peculiar waxy, yellowish, or greenish pallor of the face. The lips are also nearly colorless, and (as in common anæmia) the tongue is often pale. Œdema of the feet or of the face may occur, or a dark circle may appear around each eye. Weakness, nervousness, and palpitations exist with somewhat lowered temperature of the body. Ringing in the ears, lowness of spirits, and disturbed sleep are common. Digestion is impaired, and a *morbid appetite* is sometimes present, as for coal-ashes, slate-pencils, chalk, earth, or, in other cases, strong acids. Neuralgia, affecting especially the *abdominal* parietes, or myalgia may occur. Menstruation is either absent (amenorrhœa), irregular, or painful (dysmenorrhœa).

The *blood* in chlorosis has been found deficient in corpuscles, and containing an excess of fibrin. One of the curiosities of medical history is the fact that crude theory led at one time to the employment of venesection in its treatment, to diminish the amount of fibrin, whose excess was supposed to constitute it an inflammatory disease. Virchow asserts the predisposition to it to depend mostly upon some congenital abnormality of the heart or the aorta; especially often of the latter.

The *duration* of chlorosis is variable. It may be protracted for years. It is perhaps never alone directly fatal.

In *treatment*, measures adapted to anæmia are generally suitable. Good diet, sea-bathing, change of air, *light* gymnastics, iron, bitter tonics (sometimes even strychnia or nuxvomica in small doses) will all have their place. Certain cases do not bear iron well, from tendency to fulness of the head. Some even, chlorotic but not anæmic, need to be relieved of that symptom by the application of a few leeches or cut cups to the back of the neck.

Special attention to the menstrual function will be demanded. Of this a few words will be said in another place. (See *Amenorrhœa*.)

BERIBERI.

This endemic disease of Ceylon and a part of Hindostan, being nowhere else met with, needs here to be only defined. This will be done in the words of Dr. Aitken:—

"A constitutional disease, expressed in the first instance by anæmia, culminating in acute œdema, and marked by stiffness of the limbs, numbness, and sometimes paralysis of the lower extremities; oppressed breathing; a swollen and bloated countenance. The urine is secreted in diminished quantity. The œdema is general, not only throughout the connective tissue of the muscles, but the connective tissue of solid and visceral organs in every cavity of the body is bathed in fluid. Effusion of serum into the serous cavities very generally precedes death."

This disease may occur either in the acute or chronic form. Death may follow in a few hours, or be delayed for several weeks.

Intemperance promotes it. But there must be some undiscovered element of *local* causation.

Tonics, stimulants, and generous diet would seem to be indicated in the treatment of beriberi. Some native medicines have a reputation in India; but the management of the disease does not appear to have been satisfactory. Death is seldom averted; following either the first attack or relapses.

LEUCOCYTHÆMIA.

We have defined this affection already. (See *General Pathology*.)

The history of its discovery, which has been subject to controversy, appears to be, in brief, as follows: Dr. Craigie, of Scotland, reported (*Edin. Med. and Surg. Journal*, vol. lxiv., 1845) a case of disease of the spleen, examined also by Dr. John Reid, in which a peculiar appearance of the blood occurred, supposed by them to be "purulent." Dr. Bennett of Edinburgh, in 1845, published an account of a similar case, describing it as "suppuration of the blood." A month later Virchow of Berlin described a case presenting the same appearances under the microscope, as *leukæmia*, or white blood, asserting the view that excess of the colorless corpuscles, *not* suppuration, was the true nature of the affection. While, then, the first facts were Dr. Craigie's, the credit of discerning the pathology which explains them belongs to Prof. Virchow.² The first diagnosis of the disease during life was made by Dr. Fuller of London, in 1845.

The causes of leucocythæmia are exposure to cold and wet, prostrating disease, such as typhus, typhoid, or puerperal fever, and affections of the lymphatic glands, or of the spleen, often of undetermined origin.

Its symptoms are, debility, swelling of the abdomen, anasarca, often vomiting or diarrhœa, jaundice, and hemorrhages from the nose or gums. The spleen, and, sometimes, the liver, are en-

¹ Science and Practice of Medicine, vol. ii. p. 83.

² Prof. Bennett's labored defence of his own claim to priority does not, I think, at all contravene the above view. See his "Clinical Lectures, etc.," 2d ed. (N. Y.), p. 892.

larged. The lymphatic glands are often so, also. Cough may occur; and so may pustular eruptions. The tendency of the disease is towards death, and it is doubtful whether any case, well marked, has been cured. But it is slow, and may extend over many years.

Adénie is a name given by Trousseau to an affection (called by others Hodgkin's disease, or pseudo-leucæmia) in which the spleen and lymphatic glands are considerably enlarged, without increase of the white blood corpuscles.

Fig. 88.



Blood in leucocythæmia.

Diagnosis of leucocythæmia is only possible by microscopic examination of the blood. A drop from a needle-prick of a finger will suffice, placed under a microscope of 250 diameters or more. Instead of being but one to fifty or one or two hundred of the red corpuscles, the white blood-cells may be one to six or four; perhaps even one to two or three. When a larger quantity of blood is drawn, it has, after heating, a whitish or milky look. Its coagulum is grayish-white on its surface, from excess of the colorless corpuscles. After death, coagula are found in the heart, consisting of such corpuscles almost alone.

We have said that the *cure* of leucocythæmia has not yet followed any of the many remedies tried for it. No doubt life may be prolonged under it, by hygienic management, and tonics. Nitric and nitro-muriatic acid are recommended; the latter by the bath as well as internally.

PYÆMIA.¹

"Absorption of *pus*," as such, through the walls of blood-vessels, being shown to be improbable on account of its cellular nature, the *pus*-cells, moreover, being too large to pass through the finer capillaries, other views are now advanced. This improbability of cell-migration has been, of course, rendered less, by the investigations of Cohnheim upon the results of inflammation. Yet the *escape* of leucocytes from bloodvessels, under *pressure*, must be supposed to occur much more readily than the reverse process, of *absorption* of *pus*-cells into the vessels. Under the name pyæmia, indeed, several affections are included. 1. *Septicæmia* (Guérin) or *ichorhæmia*; *i. e.*, blood-contamination from the absorption, in a liquid state, of putrescent or otherwise morbid material; 2. Transfer by veins of actual *pus*, in cases of phlebitis (Lee), and its deposit in new localities; 3. *Thrombosis* (Virchow), or coagulation in a vein during life, followed by *embolism*, or the conveyance of a portion or portions of coagulum to different parts, causing irritation, or obstruction.

That inflammation of a vein (phlebitis) does not very unfre-

¹ First named *pyohæmia*, by Piorry.

quently occur, there is no doubt. But the external coat and surrounding connective tissue are generally most involved; and suppuration of its internal lining is rare. Coagulation is much more frequent. Embolism, however, as well as thrombosis, may, and often does, take place, without any of those general symptoms to which the name of "purulent infection" is given. Most properly, I consider, the name pyæmia should be restricted to cases in which, to cite the words of J. Simon, "some diseased part (which need not be an external wound) so affects the blood circulating through it, that this blood afterwards excites destructive suppuration in parts to which the circulation carries it—namely, commonly first in the lungs, or (in certain cases) liver and lungs, and later generally about the body. Putrid infection, septicæmia or ichorhæmia, may occur without local suppurations, but with symptoms otherwise similar. Clinical convenience may for the present readily excuse the common designation of all such cases by the term, pyæmia.

Klebs, Tiegel, and others, in their experimental researches, have identified pyæmia with septicæmia. Birch Hirschfeld¹ asserts an important distinction, in the presence of *micrococci* in the *pus*, and in the blood, of the former affection, but not in the latter. Vogt found abundance of monads in a pyæmic abscess. Recklinghausen has asserted the dependence of "multiple metastatic abscesses" upon extra-vascular accretions of fungi.

Prescott Hewett² has reported twenty-three cases of pyæmia in *private practice*, seven of which occurred in the country, and all under favorable sanitary conditions. In six of these cases some surgical operation had been performed; in eleven there was a broken surface; in six, not even an abrasion. It appears from such facts that a *constitutional predisposition* to pyæmia must exist in certain individuals; and that some, at least, of the causes of this affection are "still to be worked out."

Symptoms of such an affection are, chills, low fever, rapidity and feebleness of the pulse, prostration, delirium, and swelling of the joints. Death may occur in a few days from devitalization of the blood; or, if purulent formations occur, by exhaustion caused by their presence and discharge.

In the **treatment** of pyæmia or septicæmia, support and depuration of the blood are the indications. *Pure air* is not only preventive, but positively curative of such affections. Of medicines, the attention of the profession is just now especially called to the sulphites and hyposulphites, of sodium, calcium, and magnesium, and to carbolic acid, as antiseptic remedies. They are under trial. Several favorable cases of their use are reported; although in the U. S. army, during the late war, disappointment was experienced by a number of those who employed the sulphites. Sulphite of sodium may be given safely to the extent of four or five drachms daily; the bisulphite (Wood), about half as much, or less. It is certainly proper to give these remedies a full and prolonged trial.

¹ Gaz. Médicale de Paris, No. 20 *et seq.*, 1873.
² Brit. Med. Journal, January 31, 1874.

Dr. Fordyce Barker¹ emphatically urges the power of quinine to control the tendency to suppuration, and to prevent pyæmia and septicæmia. He gives it, for this purpose, in 10 to 15 grain doses, morning and evening, until constitutional effects are produced. It is not easy to see why quantities somewhat smaller (say 15 grains daily) might not be equally relied upon. Dr. J. S. Holden (*Lancet*, January 31, 1874) reports the recovery of a severe case of pyæmia under the use of half-drachm doses of oil of turpentine.

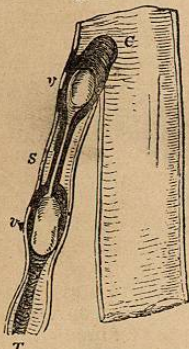
Good nursing is indispensable in pyæmia; and concentrated liquid food is of great consequence. Dr. Joseph Bell (*Edin. Med. Journal*, Jan. 1870) reports three recoveries, in which, with hardly any medicine, he gave milk with lime-water, eggs, and beef-tea at short intervals. Dr. John Wood² advises saturating the air around the patient with carbolic acid by hanging materials containing it near his bed. We can only suppose this to be required when he is necessarily confined to a room in which the atmosphere is not fresh and pure.

THROMBOSIS AND EMBOLISM.

Cruveilhier, many years ago, proved that in inflamed veins a clot is formed, principally fibrinous. Gulliver ascertained that a granular degeneration of the central layers of such a coagulum may occur, giving a "puriform" character to their substance. Virchow then demonstrated that portions of such clots may be carried from their first seat in the circulation, and form *plugs* in the pulmonary or some other artery. Afterwards it was shown (Paget, Druitt, Kirkes, Goodfellow, etc.) that not only *thrombosis* in veins, with or without inflammation, but also inflammatory or degenerative deposits on the heart's valves, may give off *emboli* or floating masses, which may obstruct the arteries of the lungs, liver, brain, or other organs, causing atrophy, or irritation and inflammation. The septic degeneration of the debris of such clots may also contaminate the blood—causing septicæmia or ichorhæmia. *Fatty embolism* may thus result (Eberth³). Fatty emboli are, moreover, sometimes (E. Wagner, Bergmann⁴) traced

to fractures or other injuries involving the medullary canals of bones. Zenker has reported a case of *fungous embolism*, occurring with thrush; mycelium of the *oidium albicans* penetrating the mucous membrane and being conveyed by its small vessels to the brain, producing there numerous small abscesses.

In 300 fatal cases of endocarditis at Berlin, Sperling found em-



Thrombus in saphenous vein.

¹ N. Y. Medical Record, July 15, 1873.

² Med. Times and Gazette, Oct. 11, 1873.

³ Berliner Klinische Wochenschrift, Aug. 18, 1873.

⁴ Practitioner, Jan. 1871.

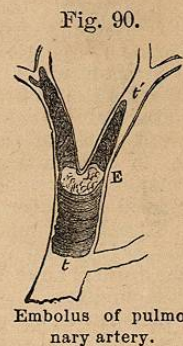
bolism to have occurred in 29 per cent.; in 26 of which cases it was upon the left side. When upon the right side, it was always in the lungs. Spalding observed the kidneys to be affected with embolism in the greatest number of cases; next, the spleen; afterwards, the brain and other parts. In practice, the *symptoms* of cerebral embolism have especially brought it before the notice of pathologists.

Emboli are, apart from their origin, chiefly *arterial* or *venous* in their *locality*. Capillary embolism is noticed especially in the brain. The arteries most often obstructed are, those at the base of the brain, the internal carotids, the femoral, brachial, splenic, renal, external carotid, and mesenteric arteries. One obstruction is apt to be the source of others. Cessation of the pulse of the arteries in a limb is an early positive sign. Gangrene is usually the last and fatal event if an extremity be involved.

When the right half of the heart has received an embolus, and the pulmonary artery is obstructed, collapse of the lungs, partial or entire, follows. Pleurisy, hemorrhage, or bronchitis may occur also. Or, the symptoms may be, great anxiety and dyspnoea, with reduction of the temperature of the body. A systolic murmur may be heard on auscultation; the rhythm of the heart becomes irregular; and pulsation of the jugular veins may be noticed. Giddiness may be present, with blueness and œdema of the hands, feet, or both. Death occurs in much the greater number of cases of embolism.

Ante-mortem clots in the heart (denied by some) undoubtedly occur in a few instances. Dr. B. W. Richardson gives as the characters of such a clot: 1st, its filling a cavity; 2d, its being grooved externally by a current of blood, or bored by a current through its centre; 3d, its being firmly adherent to the walls of the heart; 4th, its being deeply indented by the surrounding structures. Such clots are said to be met with in cases of croup, diphtheria, pneumonia, peritonitis, the ovarian operation, child-birth, erysipelas, scarlet fever, and some obscure cases almost without symptoms till near the time of death. Dr. Richardson thinks¹ that the free administration of ammonia (with iodide of potassium) may save life in some such cases.

Where emboli have become broken up and decomposed, septicæmia results—commonly known as pyæmia, as before explained. The temperature in this disorder is commonly high; from 106° to 107° in the evening exacerbation. Dr. Liddell² asserts *thrombosis* of the minute arteries of the brain to be not uncommon in aged or enfeebled persons. Occasionally it may originate in erysipelas, or some other *inflammatory attack*; or it may be *traumatic*; or dependent upon constitutional *syphilis*, or on *intemperance*. Oftener, it is *marasmic*;



Embolus of pulmonary artery.

¹ British Med. Journal, Dec. 14, 1872.

² Am. Journal of Med. Sciences, April, 1873.

i. e., attendant upon a general decline of organic force, with weakness of the heart and increased coagulability of the blood. Dizziness, frontal headache, dilation of pupils, tinnitus aurium, and tendency to lethargy are early symptoms of such a state of things; later comes paralysis, especially hemiplegia, and often convulsions. Cerebral embolism occurs more suddenly than thrombosis, and frequently in younger subjects. There is, also, generally, in embolism, evidence of disease of the heart, or of some other organ, preceding and accounting for the attack.

For **treatment** of embolism, without septicæmia, our only resources are *rest, support* by food and stimulants, and alleviation of nervous disturbance by opiates.

MUCOUS DISEASE.

Eustace Smith¹ and others have given this name to an affection, most common in women from thirty to forty years of age, in which an excessive secretion of unhealthy mucus occurs, chiefly in the bowels, with more or less consolidation in shreds or tubular casts, accompanied by symptoms of indigestion, palpitation of the heart, and mental depression. The mucus may be discharged at variable intervals, in membranous or concrete masses. Under the microscope these are found to consist (Whitehead²) of layers of an amorphous matrix, with epithelial and spherical cells imbedded, as well as free nuclei, triple phosphate, etc. In treatment, the indications are, constitutional invigoration, removal of the mucus by alkaline injections, and the use of mild astringents to prevent its reformation.

ANGEIOLEUCITIS.

Definition.—Inflammation of a lymphatic vessel.

Causation.—Any local irritation or injury may cause a neighboring lymphatic to inflame; but it is especially apt to follow a *poisoned* wound. Erysipelas may be attended by it. Dissecting wounds almost invariably produce it. In my own person this has happened several times; once, the absorbed matter so affected the whole trunk of the lymphatics proceeding from the right thumb, as to cause a large abscess in the axilla, with a severe illness. This experience has enabled me to arrive at a somewhat clear conclusion as to the nature, and consequently proper *treatment* of "dissecting wounds," which, from want of care in the prevention (by *sucking* and washing the part thoroughly at the moment of the injury) have been allowed to bring on local and lymphatic inflammation.

The pathognomonic *sign* of angeioleucitis is a distinct and somewhat elevated *red line* up the limb or the part, with tenderness well marked throughout its course.

That produced by a dissecting wound is, as I have proved, an inflammation, which may be quite *sthenic*; not necessarily "typhoid," as some have imagined. I am sure that the free application of leeches to the hand, and a large dose of Epsom salts,

¹ On Wasting Diseases of Infants and Children, London, 1870.
² Manchester Medical and Surgical Reports, 1870.

aborted one attack which was threatening to be severe. Of course some cases may be asthenic or typhoid; but of all that I have seen, with three examples in my own person, none have been so.

In ordinary angeioleucitis, the application of a light muslin or linen rag, wet with lead-water and laudanum, allowed to evaporate, will be suitable. The part must, also, of course, be kept entirely at rest.

WHITLOW.

Synonym.—*Felon*.¹ The frequency with which this comes under every physician's notice makes it a proper topic for brief remark here. A felon or whitlow is a suppurating inflammation of one or more of the fingers. Velpeau's subdivision of its varieties is as good as any; into: 1. Sub-epidermic. 2. Sub-cutaneous. 3. Fibro-synovial. 4. Periosteal. The first is trifling, the second may be severe for several days, the third may cause great suffering for two or three weeks and lame the hand, the fourth threatens the loss of a phalanx or of the finger.

Many practitioners always divide an inflamed finger down to the bone as soon as it is manifest that the inflammation is sure to progress. Velpeau advised early incision only in that form in which *periostitis* exists. I believe he was right. The only difficulty is in making sure of the diagnosis. But I would, upon experience, lean towards the doubt, and wait for suppuration, unless satisfied of the deep-seated nature of the attack.

Leeches, plunging the finger in spirits of camphor, water-dressing or irrigation, and poultices, comprise the rest of the treatment.

ONYCHIA.

Synonym.—*Paronychia*. Inflammation followed by suppuration or ulceration about the root of the nail. Injuries generally bring it on, but cachectic constitutions are most liable to it. The nail may become loosened, so as to be removable. Much more rarely, the last phalanx of the finger or toe suffers necrosis. Poultices, lime-water, solution of sulphite of sodium, etc., with rest to the part, in bed if it be a toe, comprise the usual means of treatment.

ONYXIS.

This is commonly, but improperly, called *in-growing* nail. The great toe is its much most frequent seat. It is an inflammation of the soft parts near the nail; their swelling pressing upon the latter; *not* the nail growing toward or into the flesh. The difference is important in reference to the treatment. For this, the patient must remain in bed, or at least avoid walking, until the inflammation of the toe subsides. Then the ulceration may be treated, if extensive, with lime-water, solution of sulphate of copper, persulphate of iron, etc.; and, if fungous protrusion of indolent granulations (proud flesh) exists, with touches of solid nitrate of silver every day or two. After this, or in milder cases from the first, a little strip of lint or cotton, smeared with simple cerate or

¹ The term *paronychia* is best restricted to cases occurring near the nail.