

## LECTURE XX.

### URINARY GROUP.

ARSENIC seems to affect the urinary organs sympathetically as well as idiopathically. Arsenic causes retention of urine. Hence, in diseases where this symptom is prominent, it constitutes a characteristic indication for Arsenic. Retention of urine may occur in Anasarca, in Asiatic Cholera, in Dorsal Consumption; it may be a symptom of general nervous debility, or of paralysis of the bladder. In all these cases, the existence of such a symptom would point to Arsenic.

*Retention of Urine, or Ischuria*, with great urging to urinate, and burning in the urethra during micturition, especially if other Arsenic-symptoms are present, may require the use of this agent. Such symptoms may be: great anxiety, trembling, coldness of the extremities, small and very frequent pulse, cold perspiration. An attack of this kind may befall old people.

*Haematuria* or bloody urine, may yield to Arsenic, if symptoms like those mentioned under Retention of urine are present. The discharge of blood may be symptomatic of some pathological lesion in the kidneys.

In *Bright's Disease of the Kidneys, or Albuminuria*, Arsenic may be of great advantage, were it only as a palliative remedy. In a case of chronic poisoning reported by Dr. Jackson of Edinburgh, Arsenic seems to have developed a renal degeneration resembling albuminuria. Beside the constitutional symptoms which were present in this case, and likewise prevail to some extent in albuminuria, the character of the urinary secretions strongly reminded one of this disease. The urine was scanty, high-colored, dense, albuminous, depositing blood-disks and casts of uriferous tubes of kidney.

If the pathological degenerations which generally result from albuminuria, such as: ascites, anasarca, phthisis pulmonalis, have developed themselves, Arsenic can only act as a palliative. In

*Diabetes mellitus*, Arsenic is, to some extent, indicated by the symptoms; it is problematical, however, whether this homoeopathicity extends to the essential character of the pathological process that is going on in the organism. In this respect we will offer the following suggestions: The process of nutrition in this disease is defective in a specific direction. The nutritive principles which should repair the waste of tissues, are abnormally eliminated by the kidneys as saccharine matter. The carbo-hydrates, of which sugar is one, do not constitute

the basis of tissue, "but sugar is a most important agent in the metamorphosis of animal matter. It is believed that the sugar which is found in the liver, owes its origin to the decomposition of albuminates, and more especially to fibrin. This fact, which was first discovered by Bernard, and afterwards by Frerichs, has been substantiated by numerous analyses made by Lehmann of the blood of both the portal and hepatic veins. Lehmann likewise suggests that the tendency of albuminates to pass into the butyric fermentation—a tendency which is more particularly seen in the case of fibrin and casein—may possibly be accounted for by the presence of a carbo-hydrate, sugar. Hence sugar, not only that which is introduced into the system in the form of starch, but also the sugar which is manufactured in the organism, is essential to the process of assimilation. Arsenic seems to strike down this process of assimilation in its very beginning. The action of Arsenic upon the system is characterized by all those symptoms which mark the morbid elimination of sugar by the urine; hence we have a right to entertain great hopes from the use of Arsenic in diabetes mellitus. It may counteract that condition of the nervous system which permits the abnormally excessive formation of sugar in the organism, and the consequent deficiency in the reproduction of tissue.

The conversion of bodies that had been poisoned by large quantities of Arsenic into adipocere, seems to show that Arsenic must hold some specific relation to the metamorphosis of animal tissues into fat. Lehmann has shown very conclusively that the fats are powerful auxiliaries in the formation of cells and tissues, and that, on the other hand, sugar is essential to the formation of fat. During the conversion of bodies into, adipocere, every trace of Arsenic disappears. Is it irrational to suppose that Arsenic may be in specific relation with the inimical principle which, in the living organism, paralyzes the assimilative nerve-force in a specific direction, and causes the abnormal elimination—in the form of sugar—of the primary principles essential to the process of reproduction?

Vogt claims for Arsenic a higher power to influence the metamorphosis of the tissues, than is possessed by any vegetable drug. In this respect it surpasses even most metals in penetrating power. This may seem more or less theoretical, but the long-continued effects of Arsenic upon the living tissues evince a power of disorganization which no other agent can claim to the same extent. It is therefore rational to conclude that this power may be made use of for the purpose of extinguishing or neutralizing a pathological process which results in such organic disorders as Arsenic is capable of producing. Guided by the terms of our law, we have a right to claim this power for Arsenic. It is a misfortune that the physical changes which large doses of drugs effect in the character of the urinary secretions, have not as yet been studied by positive experimentation, except in a limited number of cases. Whether Arsenic will, under favorable circumstances,

effect the abnormal elimination of sugar by the urine, remains to be determined by subsequent experimentation. Barring this uncertainty, Arsenic causes all the constitutional symptoms which supervene in the course of diabetes mellitus, such as: increased flow of urine, and dryness of the skin (a symptom observed by Langhammer and Trousseau); the skin becomes dry, brittle, and desquamates; the patient complains of dryness in the mouth, fauces and trachea; the thirst becomes unquenchable, the appetite disappears, the bowels become costive. Among the diagnostic signs of this disease, Schoenlein mentions a burning extending from the celiac plexus along the esophagus as far as the mouth. The patient dwindles down to a skeleton, and loses his strength, and very often his teeth.

All these pathognomonic signs of the disease likewise characterize the action of Arsenic upon the tissues. Future observation may determine whether the urine, under the influence of Arsenic, will exhibit the modifications which are peculiar to this fluid in diabetes mellitus, such as: a tendency to become opalescent, a greenish tint, diminution and gradual disappearance of urea and uric acid, insipid taste which gradually changes to a sweetish taste in proportion as the deposition of sugar increases. It is possible that Arsenic may only be able to palliate this disease. We have treated diabetes mellitus successfully as far as we know, but have never depended upon Arsenic alone. If the disease has a rheumatic origin, we have found it necessary to use Aconite and Mercurius, either alone or in conjunction with Arsenic at suitable intervals. Arsenic may be used from the third up to the twelfth potency; of Mercurius we prefer the third or sixth, and of Aconite we never use less than five drops of the German tincture in about twelve table-spoonfuls of water.

In his "*Grundgesetze der Physiologie, Pathologie und Homeopathischen Therapie*" Grauvogl mentions the curative virtues of Arsenic in diabetes mellitus, in the following paragraph, page 576, of his interesting work: "It is not long since complaints were heard about the neglect of Hahnemann and his personal disciples, of not having examined the urine while proving their drugs; it was said that owing to this neglect we had remained ignorant of the fact whether the urine which was secreted during these provings, contained sugar, the presence of which in the urinary secretions would enable us to determine the homoeopathicity of certain drugs to diabetes mellitus. However, as early as 1852, it is stated in the February number of Heller's Archive for Chemistry and Microscopy, that sugar is found in the urine after inhaling any sort of anaesthetic vapors; after the use of agents which depress the oxidizing process in the blood, more particularly after Arsenic, Lead, Antimony, mercurial salts, Quinine, Opium, etc. The valuable effects of large quantities of strong wines in the case of diabetic patients now became perfectly clear to me, and this explanation came so

much more opportunely as I happened to have charge of a very obstinate case of diabetes at that very moment.

"The buccal cavity of my patient was already as dry as his skin: he was absolutely unable to moisten the least mouthful of bread with any saliva, and so swallow it. Tormented by the hallucination that somebody by his side was imitating all his bodily functions, washing, eating, etc.; tortured by an unquenchable thirst, he had become so emaciated that I believed the remainder of his days was reduced to a few short hours. I now resorted to Arsenic, which was indicated by these symptoms. My patient was 48 years old, and had ruined his constitution by dissipation. Nevertheless, after a treatment of three months, I was enabled to restore him to his position in society. This case shows how important it is for homoeopathic physicians not to confine themselves to the literature of their own school, and to appropriate to their own use the experience of outside practitioners with conscientious care and discretion."

#### SEXUAL GROUP.

We have already adverted to the fact that Arsenic may cause swelling, inflammation, and gangrene of the sexual organs of the male. Alberti, in his *Jurisprudence Medicale*, Vol. L, page 167, reports a case where the internal use of Arsenic caused swelling of the testicles. We may find Arsenic useful in cases of

*Chronic Orchitis, and (Edema of the Scrotum,* resulting from, or characterizing a cachectic state of the organism, such as may gradually develop itself under the influence of a scrofulous or syphilitic dyscrasia.

It is well to note the fact that Arsenic seems to be possessed of a tendency to increase the sexual passion and to promote the secretion of the seminal fluid in the male and of the menstrual blood in the female. Arsenic causes a pressure and profuse secretion of the menstrual blood. We may avail ourselves of this symptom in conditions of general nervous debility, as an indication of Arsenic.

This agent may likewise prove available in

*Leucorrhoea* of a corrosive, ichorous character, in females of a marked scrofulous diathesis, or where the discharge proceeds from

malignant ulceration of the neck of the womb. In some cases, the lower, in others the middle and higher preparations may be required. It may likewise be

advisable to apply a solution of the third or fourth potency, centesimal scale, locally.

### CATARRHAL GROUP.

Arsenic develops a train of symptoms which lead us to infer that it may be useful in catarrhal affections of the head and air-passages. On looking at the pathogenesis of Arsenic, we find that it causes excessive coryza or coryza of an acrid nature, hoarseness, tenacious mucus on the chest, cough with blood-streaked expectoration, or distressing and fatiguing cough accompanied with a variety of other symptoms which it seems needless to enumerate in this place.

We may find Arsenic indicated in

*Coryza*, or Catarrhal Irritation of the Schneiderian membrane, with redness and swelling, and discharge of a quantity of thin, acrid, ichorous fluid. Also in common

*Cold in the Head*, with a good deal of sneezing and acrid discharge from the nose; the head feels dull and tight, the patient complains of coldness, creeping chills, feels weak, looks pale, is indisposed to move about or to attend to business. In catarrhal affections of the head, where Arsenic is indicated, we shall find, as a general rule, that they are symptomatic of

*Influenza*, more particularly, if this disease prevails in a community extensively in consequence of atmospheric irregularities, or as an epidemic miasmatic disease. The patient feels very much prostrated; the above mentioned catarrhal symptoms are present in a more or less marked degree; the patient complains of bad taste in the mouth, feels thirsty, chilly and feverish, he craves cooling drinks, is sick at the stomach, feels sore all over, looks sallow and distressed, is disposed to sleep, low spirited, tremulous. The respiratory organs may be more or less involved, and we may have as other prominent indications

*Hoarseness*, amounting even to complete

*Aphonia*, resulting from excessive weakness of the organs of voice, as if they were paralyzed. This condition may be accompanied by

*Cough*. The character of the cough to which Arsenic is in homoeopathic-specific rapport, is delineated in the recorded provings of this drug. We find that it is a dry, exhausting cough, or a cough attended with hawking up of blood-streaked mucous, cough which is particularly violent at night or where the paroxysm is excited by drinking cold water: the chest feels sore, as if excoriated internally; the breathing is oppressed, and the heart may beat violently. The pulse inclines to be feeble, rather hurried and irregular; the temperature of the skin may be depressed below the normal standard. This remark applies to cough in connection with influenza, or catarrhal cough generally.

THORACIC GROUP. Arsenic affects the nervous ramifications and the mucous lining of the respiratory organs, of the lungs as well as of the bronchial tubes. The various forms of cough, the suffocating dyspnoea, the constrictive

oppression, the burning distress in the chest, the wheezing murmur which Arsenic causes, substantiate this doctrine.

Arsenic seems therefore eminently homoeopathic to a most dangerous affection of the respiratory organs which some pathologists describe under the name of *Pneumonia notha*, and others as *Catarrhal Bronchitis*, or *Bronchitis asthenica*, *Bronchitis senilis*.

Schoenlein describes this affection as *Suffocative Catarrh*, to which persons of more advanced years are subject. It is an exceedingly dangerous affection which may terminate fatally after a very rapid course by paralysis of the mucous membrane of the respiratory organs. The main symptoms in this affection are: a burning distress in the chest, principally behind the sternum; dyspnoea, violent rattling of mucus in the air-passages, fatiguing cough, expectoration of semi-transparent, gray, ball-shaped mucus which may float in a quantity of serous fluid. The affection may commence with chilliness which may continue for a few days, during which period it may be interrupted by occasional flashes of heat until the heat becomes permanent. The tongue is comparatively clean, there is a great deal of thirst, pulse from one hundred to one hundred and twenty, sometimes rather full. Symptoms of venous congestion, such as: bluish lips and venous engorgement of the cheeks, soon show themselves.

Among the medicines which are eminently adapted to this condition Arsenic is one. We have shown on a previous occasion that Aconite is likewise a leading remedy for this dangerous affection. We prefer the *middle* potencies from the sixth to the twelfth. ,

*Haemoptysis* or *Bloody Cough*, will yield to Arsenic. Sudden attack of suffocative cough, with tickling in the throat-pit; soreness either at a seated spot or shifting from one portion of the chest to another; excessive oppression; trembling and chilliness, with coldness of the skin, and a feeble hurried and almost compressible pulse; pinched-up features, expression of anxiety and distress in the countenance, sallow, or dingy-brown complexion: these are the leading symptoms which indicate the use of Arsenic in haemoptysis. The blood may be spit up in various quantities, from a spoonful to half a pintful; it has a bright-red color.

In pulmonary hemorrhage, where Arsenic is indicated, the symptoms are often traceable to derangements in the functions of the liver, such as gnawing in the stomach, and unnatural craving for food; dryness in the mouth, frequent desire for cold drinks, soreness and burning in the region of the liver; pain at the shoulder, etc. All these symptoms point to Arsenic.

*Phthisis Pulmonalis* has been treated with Arsenic, by some with apparent success, and by others with no success at all. Arsenic undoubtedly affects the lungs in a specific manner. Dr. Marcy refers to a case of chronic poisoning by Arsenic, to which we have referred on a former occasion, where the symptoms indicate in a most marked manner the disorganizing action of Arsenic upon the respiratory

organs. The case was originally reported in the London Lancet. The prominent symptoms in this case of poisoning were:

"Sickly look; small, frequent pulse; frequent slight tickling cough, or rather hawking without expectoration; occasional discharge of mucus from the bowels, often tinged with' blood; tenesmus and griping of some days' standing; flatulence; redness of the eye-lids and lining membrane of the nostrils; loss of appetite and failure of strength; restlessness at night; increasing weakness; dryness or tightness of throat; hoarse voice; later, the stools assume a fatty appearance, owing to the presence of pus, as proved by microscopical examination; tongue red and fiery, mouth and lips excoriated, anxiety and restlessness very great; percussion reveals tubercular infiltration at the summit of both lungs, most in the right, indolent in both, symptoms resembling tuberculosis of the abdomen and chest; conjunctiva much injected; anus excoriated; hiccough, restlessness, and general distress; pulse 130, and feeble; urine scanty, high colored, dense, albuminous, depositing blood-disks and casts of uriniferous tubes of kidneys. Died with tetanic spasms, with mental faculties perfect."

"The arsenical vapors," says Mahon, in his *Medicine Legale*, "when drawn into the lungs in great quantity, render the mouth and throat dry, parched and inflamed; they first produce sneezing, then suffocation, asthma, dry cough, anxiety, vomiting, vertigo, pains of the head and limbs, tremblings; and when they do not produce death, they lead to *Phthisis Pulmonalis*."

Hufeland repudiated the use of Arsenic, because he found that it gave rise to phthisis pulmonalis.

Pachenius informs us, in his "*Hippocrates Chemicus*," that the vapors of Arsenic caused in him dyspnoea, colic, convulsions, bloody urine, paralysis of the limbs; milk and oil moderated the symptoms, but *Cough* and *Hectic fever* troubled him for a long time.

Henkel, in his treatise on the "Diseases Incidental to Smelting and Mining," says that the vapors of Arsenic cause cough, ulceration of the lungs and rapid death.

In this terrible malady, the arsenical preparations may be of use in many cases; but it would be very unsafe to expect curative effects from Arsenic in all cases and forms of phthisis. It may afford palliative relief in many, and it may effect a cure in other cases. The choice of Arsenic in cases of phthisis where it may possibly be of use, will depend in a great measure upon the perceptible symptoms, upon the nature of the cough, the character of the expectoration, the peculiar kind of distress that the patient experiences in the chest, and even upon isolated symptoms peculiar to Arsenic. Auscultation and percussion may be resorted to for the purpose of determining the character and extent of the pathological process that is going on in the chest; they may inform us that a vomica exists in one locality; that it is either empty or filled with pus; that the pulmonary pleura is adhering to the sides of the thorax; where and to what an extent the pulmonary tissue is infiltrated with blood and purulent matter;

whether a bronchial tube opens into a vomica; whether another tube is dilated. Auscultation and percussion may develop a very accurate picture of the physical condition of the lungs. But this is all that an examination of the chest by the stethoscope can reveal to us. The physical signs do not enlighten us concerning the remedial agents which will counteract and hush up the disorganizing process that is slowly but surely leading the patient to his grave.

Knowing that Arsenic excites in the respiratory organs a process similar to phthisis, we determine its applicability in particular cases by the character of the symptomatic indications. If these are not sufficiently precise and definite, we shall not be able to derive much benefit from Arsenic or from any other drug. Among the symptoms which will have to guide us in our choice, we distinguish the following, all of which characterize the action of Arsenic upon the normal tissues:

Hoarseness;

Oppression on the chest;

Short and laborious respiration, which is often painful;

Sensation of rawness and soreness in the chest;

Titillation in the wind-pipe, continually, exciting a cough; the titillation is felt even when the patient does not draw in air;

Dry, hacking cough, also with expectoration of blood-streaked mucus;

Burning distress in the chest; .

The cough is excited by swallowing cold liquids, water, etc.

*Chilliness in the Interior of the Chest*, also after supper.

In phthisis pulmonalis, especially in the tubercular form of phthisis, the *Iodide of Arsenic*, second or third trituration, may be substituted for Arsenious acid, giving it in half grain doses every two or three hours.

Arsenic may be adapted to.

*Phthisis Mucosa* or *Pituitosa*, if the patient should be troubled with dyspnoea and constrictive, suffocative paroxysms on the chest; or if an exhausting, offensive diarrhea should set in, or if debilitating night-sweats preceded by creeping chills and fever, should become very troublesome. In this condition of the system, *China* might be used in alternation with Arsenic. The middle potencies may perhaps be the most serviceable.

In the last stage of *Tubercular Phthisis*, Arsenic may relieve the burning and dyspnoea which often distresses the patient. In

*Bronchitis*, Arsenic may be of service, if the ulcerative stage has begun to set in. There may be great tickling in the throat-pit, and excessive soreness in the terminal ramifications of the air-passages. The racking cough and the expectoration of bloody pus having & sweetish, sickening, offensive taste, together with the constitutional symptoms such as: trembling, debility, loss of appetite and flesh, etc., point to Arsenic, from the eighteenth to the thirtieth potency. In the stage of

*Pneumonia*, which we term the stage of white hepatization, Arsenic may be of use to the patient. The lungs have a grayish appearance in consequence of the parenchyma being infiltrated with exuded lymph, which is traversed here and there by streaks of the remaining pulmonary tissue. When this stage of the disease sets in, the face becomes pale and disfigured, the breathing anxious and panting, the pulse small and feeble, the forehead is covered with a clammy sweat. Give Arsenic twelfth to eighteenth potency.

Arsenic may likewise be in homoeopathic rapport with pneumonia in the stage of red hepatization. In cases of poisoning, inflammation of the lungs has frequently occurred. Christison mentions a number of such instances. " Dr. Camphell twice found great congestion of blood in the lungs of animals poisoned by the application of Arsenic outwardly. Sproegel likewise found the pleura, pericardium, and whole lungs deeply inflamed in animals.

"A distinct example of advanced pneumonia in man is related in Pyl's Magazine: the patient died after vomiting and purging incessantly for eight days; on dissection, the lungs were found in the highest state of inflammation, and so congested as to resemble a lymph of clotted blood. A distinct case of the same nature is related in Henke's Journal; this patient had obvious pneumonia symptoms during life; and in the dead body the lungs were found so gorged that, on being cut into, nothing could be seen but clotted blood in their cellular structure. In Roux's case, where Arsenic was applied externally to a scirrhus ulcer, excessive congestion was found in the lungs, both lungs being completely gorged with blood and presenting all the characters of pulmonary apoplexy."

These post-mortem appearances do not, strictly speaking, constitute therapeutic indications; they are of no immediate avail to us is the selection of a drug. The subjective phenomena occurring during life may be rendered clearer to us in fatal cases by the existing postmortem changes; but in all subsequent cases of a similar order, the selection of the drug to be administered in the case will necessarily depend upon the character of the subjective phenomena and upon the physical signs. In pneumonia Arsenic may be indicated by a peculiar order of symptoms, excessive oppression, violent chills succeeded by a burning fever and rapid, hard and bounding pulse; dark flushes in the face which exhibits a sallow, jaundiced tint as its ground color; the patient complains of paroxysms of tearing, racking cough with expectoration of pure blood and blood-streaked mucus; palpitation of the heart, intense soreness in the chest, burning and stinging pains in the chest. Nausea and vomiting of bile and mucus may not be wanting. Give the sixth to the twelfth potency, sometimes lower.

The effects of Arsenic upon the respiratory organs show that it must be in curative relations with *Asthma*. On reading over the symptoms obtained by proving, we shall find that Arsenic causes: Constriction of the chest, dyspnoea, asthma, oppression and anxiety, anxious and moaning respiration, suffocative feeling.

Buchner informs us in his *Repertory for Pharmacy*, that Walth had inhaled during the day the vapors of six grains of arsenious acid, which he had thrown upon red-hot charcoal, and that he had not experienced any bad effects from it except an offensive odor. After having slept for two hours in the evening, he suddenly awoke with a feeling of oppressive anxiety, gasped for air, the windpipe felt as if constricted, and he fancied he should suffocate; his pulse was irregular and hurried; he had violent headache. After the vapors had been permitted to escape through the open window, he laid down very faint; a profuse sweat broke out; next morning he only felt a little headache. One of his companions fared still worse.

We therefore have a right to recommend Arsenic in asthma, especially if the attacks come on at night; for this nightly supervention or exacerbation of the symptoms is characteristic of Arsenic. The paroxysms of asthma to which Arsenic is homoeopathic, are characterized by a feeling of suffocative constriction and anxiety in the chest, paleness of the face, feeble, hurried and sometimes irregular pulse. The paroxysm may gradually terminate in heat and dryness of the skin, gradual breaking out of perspiration and loose cough.

Asthma has frequently been cured with Arsenic.

Dr. Attomyr treated a wine-merchant who had been suffering for eight years with spasms in the chest every evening; asthma, wheezing expirations; had to sit up bent forward.; gradually the orthopnoea increased, the expiration had a fine wheezing sound. Agonizing anguish and sweat all over. The paroxysm lasted from three to four hours; after the paroxysm, the patient felt a burning, sore pain in the chest. Going into the cellar caused the attack. After Arsenic 30, the patient had no more attacks, and was able to bear the cellar.

Dr. Gaspary relates the following case: A cloth weaver thirty-two years old, tall and slender, had been suffering for a year as follows: weakness of memory, dull feeling in the head, pressure in the forehead and right temple; right eye red and inflamed, with pressure, pain and drawing. Dim sight; sees things as through gauze; nightly pain in the teeth and malar bone of right side, a throbbing, eased by warm fomentations. The teeth feel elongated; mouth full of mucus, wants to spit all the time; no appetite; constant cough, with tenacious mucus on the chest; cough with asthma after lying down; he has to sit up. Stitches through the head when coughing. Flow of water from the mouth when coughing; the mucus is yellowish-white, tenacious. Sensation as if the chest had too little air, especially in the pit of the stomach; at every movement he loses his breath, feels anxious and prostrated, as if he should die; sleeplessness; depression of the spirits; his limbs feel sore and painful. One dose of Arsenic cured him in four weeks.

*Angina Pectoris* is another affection which Arsenic may cure. Arsenic causes a similar affection. According to Myrrhen, Arsenic causes "a sudden nocturnal paroxysm of suffocative catarrh." The paroxysm as described by Myrrhen, constitutes the disease which modern pathologists describe as *angina pectoris*.

Hahnemann informs us in a foot-note to Arsenic that he cured himself of such an attack, which came on every evening after lying down, and finally brought him to the brink of the grave, by means of a very small dose of Arsenic.

Alexander informs us that he cured a most formidable case of angina pectoris by means of five drops of Fowler's solution taken three times a day.

Arsenic will prove of great benefit in affections of the heart.

Wibmer thus sums up the action of this poison upon the heart. " The heart is generally relaxed, not engorged with blood; in the interior of the heart, and especially on the columnar carneae and on the valves of the ventricles, particularly those of the left, we frequently perceive a redness spread over a greater or less extent; in most cases we see small, red spots penetrating into the fleshy sub-' stance to the depth of one or more lines. The pericardium generally contains a little serum. The blood in most cases has a dark color, is blackish and viscid, coagulated."

These post-mortem changes contain those which Orfila describes as having occurred in a case of poisoning examined judiciously at Paris by this learned man. The case having been brought before the Imperial Academy of Medicine, it was distinctly shown by many members that the redness seen on the inner surface of the heart, so far from being the result of inflammation, was produced by sanguineous extravasations. Christison, Flandin and other toxicologists, deny the correctness of Orfila's conclusions that Arsenic may induce endocarditis.

Be this, however, as it may, the symptoms observed during life, show that Arsenic must be an important agent in affections of the heart. The symptomatic indications which point to Arsenic in affections of the heart, are various: Dyspnoea, feeling of constriction across the chest, palpitation of the heart; anxiety, sense of suffocation; irregularity and intermission of the pulse, which is moreover jerking and rather hard; burning distress in the chest and region of the heart; dry, barking, fatiguing cough; immediately after coughing, the breath becomes very short as if the chest were constricted.

In *Pericarditis*, these symptoms occur in a measure. In this disease Arsenic should not be forgotten. In idiopathic pericarditis arising from exposure to a draught of air or generally of a rheumatic character, Arsenic may be unavailing; Aconite, Pulsatilla, etc., may be indicated in such cases. But in pericarditis, developing itself by a process of metaschematismus, or as a sequela of scarlet-fever, under the influence of some constitutional dyscrasia, Arsenic may prove eminently useful.

In *Hydro-pericarditis*, or *Dropsy of the Pericardium*, if arising under circumstances like the foregoing, Arsenic is in its place. In acute pericarditis arising from the sudden suppression of an acute inflammatory eruption such as measles or scarlatina, it may be advisable to give Arsenic in alternation with the tincture of Aconite. Dropsy of the pericardium may likewise develop itself suddenly in consequence of the sudden suppression of the menstrual discharge. In such a case Arsenic may have to be used in conjunction with Aconite and Pulsatilla. But

when arising from causes similar to those which have been mentioned under pericarditis, Arsenic and Digitalis may have chiefly to be depended upon. In acute or sub-acute cases, and in the case of children, we prefer the lower preparations; in the case of older persons, or in slow, chronic cases, the middle.

In *Carditis Serosa*, or inflammation of the serous membrane reflected over the heart, Arsenic may be useful in the progress of the disease, if the pulse becomes feeble and contracted, the coldness of the extremities increases, and the countenance of the patient expresses anxiety and restlessness. If exudation takes place, so that the beats of the heart become imperceptible, or are felt posteriorly, in the region of the shoulder blade, Arsenic is often the only agent capable of counteracting the morbid process, especially in impoverished, cachectic constitutions.

In the acute form of the disease, where it has developed itself from inflammation of the pleura, or in consequence of rheumatic exposure, or of menstrual suppression through fright, etc., it is indispensable to commence the treatment with the tower potencies of Aconite.

From the post-mortem symptoms reported by Orfila, we would seem to have a right to infer that Arsenic may be useful in inflammations of the internal membrane of the heart, which may result in exudations and polypus formations of the ventricles; whence this form of carditis is very aptly designated as

*Carditis Polyposa*. The disease may be of rheumatic origin, or it may have been caused by a fright. In such a case, Aconite is indispensable at the outset of the treatment. The symptoms are exceedingly marked: excessive restlessness and anxiety, violent contractions and palpitations of the heart; rigors, burning heat and dryness of the skin, violent thirst. Aconite should be given in tincture-form or from five to ten drops of the first decimal attenuation in ten table-spoonfuls of water; but if the dyspnoea increases to orthopnoea; if the rigors occur in the midst of the burning heat; or if the extremities become cold, and a cold clammy sweat begins to show itself upon the forehead: Arsenic has to be given, or even before, if after repeated doses of Aconite the patient experiences no relief. In

*Carditis Scorbutica*, scorbutic inflammation of the heart, where the attacks set in with livid color in the face, dirty-yellow appearance around the mouth, symptoms of scorbutic disorganization, enlargement of the liver, etc., Arsenic is probably the only medicine that can do any good.

In *Fatty Degeneration of the Heart*, Arsenic may prove useful. We know of no agent that is possessed, to a greater extent than Arsenic, of the power of effecting a morbid deposition of adipose matter in the tissues. We know that in slow cases of poisoning by Arsenic, this species of abnormal metamorphosis has taken place in the pulmonary parenchyma, in the kidneys, and in the intestinal canal. In a case reported in Frank's Magazine, a young man discharged *fatty masses* from the bowels. In a case reported by Morgagni, and quoted by Hahnemann, the patient passed a ball-shaped clot which seemed to be composed of *tallow* mixed with tendinous matters. This took place eight days after poisoning. We need hardly

remind the reader of the remarkable property possessed by Arsenic of converting dead animal tissue into adipocere.

The symptoms which are present during this abnormal metamorphosis, likewise point to Quinine: slow and feeble pulse, fainting turns, neuralgic pains in the chest, dyspnoea. *The arcus senilis*, by which we understand a fatty degeneration of the cornea of old people, is usually accompanied with fatty degeneration of the heart.

In *Hydrothorax*, Arsenic may afford relief. This disease may be symptomatic of organic disease of the heart, or lungs, in which case a cure is impossible. Idiopathic hydrothorax may yield to treatment. If the patients are of an impoverished constitution, subject to fainting turns, oppressed by anguish, suffering with great dyspnoea, feeling worse in the night, extremities inclining to be cold, face bloated and clammy, expression of suffering and dread in the features, small, feeble, hurried and somewhat irregular pulse, thirst\* inability to drink cold water without coughing: we may prescribe Arsenic.