

promoting contraction of the womb. Ammonio-ferric alum is also a good medicine to give by the mouth in the same case. Dr. Robert Lee has recommended *digitalis* in monorrhagia; using rather large doses, but not continuing them long. Locally, ice or iced water may be (with care not to chill too much) applied for a short time over the hypogastric region, or thrown into the vagina. Tincture of chloride of iron, in strong solution, will have a powerful effect. Tannic acid or matico may be likewise applied, or the "styptic rod" of tannic acid and cocoa-butter, shaped to fill the vagina. But threatening cases (except *post partum*) may require the actual *tampon*, or plug of lint for the whole vagina, or the sponge-tent inserted into the os uteri itself. Stimulants may at times be called for, to prevent fatal exhaustion under large hemorrhage, either from the uterus or from any other organ. Pressure upon the aorta has sometimes been resorted to, through the abdominal walls, in uterine hemorrhage. Other measures, suitable after delivery, belong to the department of obstetrics.

Habitually excessive menstruation requires that the patient so affected should maintain absolute rest, from the beginning of the flow till its cessation. Iron is nearly always indicated in such cases through the interval; particularly the tincture of the chloride of iron.

#### DROPSICAL AFFECTIONS.

**Varieties.**—1. *Edema*, local infiltration of connective tissue with serum. 2. *Anasarca*, general cellular dropsy. 3. *Hydrocephalus*. 4. *Hydrothorax*. 5. *Hydropericardium*. 6. *Ascites*. 7. Other local dropsies; as *Ovarian dropsy*, *Hydronephrosis*, *Hydrocele* of the testis, etc.

**Causation and Pathology.**—Obstruction to the venous circulation, arrest of excretion and absorption, and excess of water in the blood, are the three cardinal elements of the pathological causation of dropsy. Either one may induce it. Disease of the heart, or of the liver, brings on dropsy by venous obstruction. Disease of the kidney, or the action of cold and wet upon the skin, may produce it by checking excretion. Wasting diseases are liable in their advanced stages to oedema and anasarca, on account of the watery state of the blood.

**Acute general dropsy** results from the powerful impression of cold and wet, or of the scarlet fever poison, upon the system, suppressing both the action of the kidneys and that of the skin at once. Its most common form is anasarca; but it may take that of ascites, hydrothorax, or even hydrocephalus. When from cold and wet, it is much more curable (especially anasarca or ascites) than similar dropsy of *visceral* origin, *e. g.*, from disease of the heart. Albuminous urine is quite common in acute general dropsy.

*Hydrocephalus*, *Hydropericardium*, and *Hydrothorax* have been already sufficiently considered.

**Ascites** is peritoneal dropsy; accumulation of water in the abdomen. The **causes** of this of greatest frequency are cirrhosis of the liver and disease of the kidney. It may also follow obstruc-

tion of the portal vein by cancer, or general obstruction of the circulation from disease of the heart, aorta, or spleen; and it is sometimes ascribed to chronic peritonitis.

**Symptoms and Diagnosis.**—Often with emaciation of the face, neck, and arms, there is great enlargement of the abdomen. When this is far advanced, *orthopnoea* exists, from pressure upon the diaphragm. The patient is generally weak, with poor appetite and deficient rest at night.

On *inspection*, in the upright posture, the fulness is greatest in the lower part of the abdomen; when recumbent, it spreads evenly; on one side, it falls over that way. *Palpation* will make evident *fluctuation*, especially when one hand is placed on one side of the abdomen and the other strikes gently, at a distance of a few inches. *Percussion* discovers resonance above and about the umbilicus, the intestines rising there upon the fluid to the surface under the abdominal walls. Elsewhere the sound is dull, even flat.

The amount of fluid in ascites is sometimes immense; as much as twenty-five pints have been withdrawn at once by tapping. It is generally clear, pale yellow or colorless, albuminous and alkaline.

**Ovarian dropsy.**—Leaving the *history* of this, as belonging to the special department of diseases of women, it is right to state that its diagnosis is important, but not always easy. Like ascites, it produces abdominal enlargement, with dulness on percussion and fluctuation. The most nearly constant points of distinction are, that the ovarian tumor begins somewhat on one side, and only by degrees becomes symmetrical; its shape is, throughout, more globular and coherent, and altered less by changes of position; and the intestines do not float up above the umbilicus so as to make a clearness of percussion-resonance there. The progress of ovarian dropsy is usually slower, and is attended by less proportionate depression of the general health.

**Treatment of Dropsy.**—Acute general dropsy, from suppression of the action of the skin and kidneys, should be treated by active purgation and the use of diuretics. Jalap and cream of tartar (gr. x of the former with  $\mathfrak{z}\text{ij}$  to  $\mathfrak{z}\text{iv}$  of the latter) every day or two, will answer well for catharsis. The diuretics most satisfactory are the infusion of juniper berries (a pint daily), acetate of potassium, citrate of potassium, squills, and sweet spirits of nitre [F. 37, 38, 39, 40]. When the patient is hard to purge, elaterium may be given, in gr.  $\frac{1}{4}$  doses, every four hours till it operates.

Murchison reports favorably of the use of *digitalis* both internally and *externally*,<sup>1</sup> in ascites.

Ascites, or other dropsy, from disease of any of the great organs, kidneys, liver, or heart, being less curable, and attended by greater general debility, needs more economy of strength. No doubt exists that real harm may be done by the routine of severe purging and plying with diuretics. The one may render the blood thinner and aggravate the constitutional disease, while the others, failing to remove the fluid by secretion, may even irritate the kidneys to

<sup>1</sup> Brit. Med. Journal, July 17, 1872.

the point of suppression of their action. Nourishing concentrated food, tonics, anodynes, etc., may, in visceral dropsy, be of more importance than diuretics. Of course it is desirable to lessen the accumulation of fluid; but the effects of the remedies used must be observed, and one symptom must not be allowed to overshadow the rest.

When enormous distension makes rest impossible, almost preventing breathing, it is necessary to relieve it by any possible means. Then, purging, as by elaterium, should diuretics fail, must be resorted to. Or, if the patient's stomach or general strength will not bear that, tapping is called for. Some patients require this many times.

The operation is best performed while the patient is lying down, upon the side, near the edge of the bed. A trocar and canula are introduced half way between the pubes and the umbilicus, and the fluid is drawn out through the canula. Dr. T. G. Morton,<sup>1</sup> of Philadelphia, has designed an improvement in the ordinary canula, by adding near its upper end a short silver tube, upon which india-rubber tubing may be attached. Thus fluid may be conveyed away in any desired direction; the extremity of the canula being closed with a plug. Lastly a bandage (with a compress) is applied firmly around the abdomen. Some practitioners favor keeping open the orifice with a slip of lint, to maintain drainage. If no local irritation occur, threatening peritonitis in consequence, this may be a serviceable measure. If the bolder practice of injecting iodine after tapping (as in hydrocele) should be thought of in any instance, it must be in that of simple peritoneal dropsy, uncomplicated by serious visceral disease.

Sometimes œdema of the lower limbs and scrotum becomes so great as to cause great inconvenience. Then the fluid may be let out by making a number of small punctures with an abscess lancet or small pointed bistoury. Dr. Handfield Jones recommends<sup>2</sup> a single puncture in each leg, with a trocar, leaving the canulas in to drain for several hours. The only drawback to this practice is the possibility of erysipelalous inflammation about the punctures. Such danger will not be at all great if, immediately after the operation, the parts be soothed by bathing or anointing the skin with diluted glycerin (fʒj in fʒj of rose-water), or cold cream (ung. aq. ros.), or glyceramyl (glycerin and starch) [F. 148].

For the treatment of ovarian dropsy, the reader is referred to works upon surgery. I only venture the opinion, that the place of ovariectomy has hardly yet been defined, clearly and with certainty, by experience. If compelled to decide upon it in a doubtful case, I should incline towards the views of those who make it a rare operation.

<sup>1</sup> Philada. Medical Times, May 30, 1874.

<sup>2</sup> Practitioner, April, 1871.

## ZYMOTIC DISEASES.

### VARIOLA.

**Synonym.**—*Smallpox.* **Varieties.**—Discrete and confluent;<sup>1</sup> also, *varioid* or modified smallpox, after vaccination.

**Symptoms and Course.**—*Stages:* These are, *incubation, primary fever, eruption, secondary fever, and desquamation.* The incubation (period between exposure to the contagion and beginning of the attack) lasts about twelve days. The first symptoms are languor, headache, vomiting, and severe pain in the back; soon developing into fever. On the third day of this, pimples, at first small and red, appear, first on the face, then on the neck, arms, trunk and lower limbs. These papules become vesicles, and then pustules; suppurating perfectly by the ninth day of the fever. Then they flatten and scab. Four or five days later, about the fourteenth day of the fever, these scabs begin to fall off. Desquamation is commonly completed by the end of the third week of the attack. To recapitulate: there are, after about twelve days of incubation, three of primary fever, six or seven for the coming out and maturing of the eruption, four or five for its scabbing, and six or seven for desquamation.

These periods vary somewhat; and the severity of the disease depends mostly upon the amount of the eruption. This makes the difference between the discrete (scattered, separate) and confluent smallpox. Even the primary symptoms are generally worse in the latter. The secondary fever, connected with the full development of the eruption (about the eleventh day of the disease), is much the most severe in the confluent. The suffering of the patient is great, even extreme, in this form, the whole surface of the body being covered with inflamed pustules. Even the eyes, mouth, and throat may be invaded. Blindness sometimes follows; and I knew of one case in which the eruption in the throat proved fatal by obstruction of the breathing and swallowing. A peculiar and disagreeable odor emanates from the body in confluent cases.

**Malignant** smallpox is simply a violent form of it characterized by rapidity and extreme prostration, with or without extensive pustulation. The eruption in it is sometimes attended by lividity of the skin. Delirium is common, and a typhoid stupor may exist.

After smallpox, abscesses in various parts of the body, hard glandular enlargements, ulceration of the cornea, suppuration of the ear, pneumonia, or pyæmia may occur.

The danger to life in this disease is always serious. Before vaccination was introduced, thousands died annually from smallpox.

Of those attacked, 1 in 8 died; in infancy, 1 in 3. Dr. Lettsom, of London, estimated that 210,000 died every year from it in Europe before the time of Jenner; 45,000 annually in Great Britain and Ireland alone.

<sup>1</sup> Hemorrhagic smallpox has been occasionally described; it must be very uncommon.