

the recuperative capacity of the system, and in the long run repeated losses break down the constitutional powers. Bleeding, therefore, must, as a rule, be stopped. Three principles call for attention. The first is to produce such a change in the condition of the diseased part as will lessen its morbid activity and the determination of blood to it. The means of accomplishing this are included in the curative treatment: removal of the diseased mass wholly or in part, by cauterization, by knife or scraper, and the securing a new surface.

The second principle is that of simple hæmostasis. This is carried out by the direct application of styptics. Amongst these the best are chromic acid, nitric acid, perchloride and persulphate of iron, and iodine. To apply these effectually, the speculum must be used. Great care is necessary in passing this instrument, as the fragility of the morbid tissues is so great that it is often difficult to introduce it without causing fresh bleeding. If chromic acid be used, the crystals just moistened with water is the best form. A small pledget of lint or cotton wool steeped in this is then pressed gently on the bleeding surface. It turns the part bright yellow, chars it, and generally stops the bleeding effectually. The superfluous acid can be washed out by a Higginson's syringe. Nitric acid fuming should be used in a similar manner. The iron-styptics should also be used very strong.

The third principle is that of regulating and moderating vascular excitement. This is promoted by salines, digitalis, bromides, hamamelis, perhaps ergot. It is important to obviate fecal accumulations in the lower bowel; and scarcely less important to keep the glandular system, including the skin, in good working order.

But since an attack of hemorrhage may come on at any unforeseen time, and under circumstances which preclude skilled assistance, the patient or her attendants must be armed with appliances and instructions to meet the emergency. As a temporary expedient, a lump of ice may be passed into the vagina. But a more certain way is first lightly to syringe out the vagina with cold water, then to introduce by means of my plug-speculum (see p. 156) a pledget of cotton-wool soaked in the strong solution of perchloride of iron. As a rule, the plug should not be left in more than an hour. Its retention is often accused by patients of causing heat, distress, and of provoking return of bleeding.

The control of the offensive watery discharge includes the use of *deodorants or disinfectants*. Cleanliness is the first thing to secure. Syringing with Condly's solution is of service. But since the frequent use of instruments is attended with more than inconvenience, injection of more efficient disinfectants should be resorted to. The agent which has given me the most satisfaction on the whole is acetate of lead. The action of this is hæmostatic, deodorant, and sedative. It has often struck me that it has a beneficial effect upon the diseased surface. It may be used in the proportion of one drachm to a pint of water. An excellent disinfectant is a weak solution of bromide made of five fluidounces of the British Pharmacopœia solution diluted with fifteen ounces of water. One objection to its use, inseparable however from its virtues, is that it has a pungent odor. A weak solution of carbolic acid is often useful. I have found creasote singularly efficacious, and in a ward where a cancerous

patient is so often a source of annoyance to other patients, the nurses have assured me that the odor of creasote so used was not only not complained of, but was even liked. Chlorozone is an excellent disinfectant. Alum is one of the best deodorants. Its property of coagulating albuminous matter makes it extremely useful in these cases. Chloride of zinc has also its advantages; but the lead and alum, being powerful astringents, are generally to be preferred. I have tried the much-vaunted chloralum without discovering that it is superior to the agents described above. Dr. Burow, of Königsberg, speaks highly of the effect of the chlorate of potash upon ulcerating carcinoma. The surface is sprinkled once a day with the salt.

The steady use of styptics and disinfectants is often attended by good effects in lessening constitutional infection. By removing the foul excretions as soon as formed, and by altering the excreting surface, absorption of noxious material is prevented. In this way the agents we have been describing exert an important secondary effect.

The *constitutional* treatment or management of cancer patients is a matter of great importance. We may with advantage begin by eliminating the lædientia. Foremost amongst these is excess of alcohol. Stimulants carried beyond the most moderate extent are decidedly injurious. By exciting the circulation, they increase the determination of the blood to the diseased organ, and promote hemorrhage, if not also the advance of the disease.

The diet of patients suffering from cancer is a matter of great moment. Mr. de Morgan called attention to a fact, the truth of which cannot be doubted, namely, that the disease occurs for the most part in persons strong and well-nourished and remarkable for general good health. This shows that the disease does not arise from want of tone or defect of nutrition. Hence it would appear very doubtful whether it is wise to recommend the patient, as is often done, "to keep up well," to take plenty of nourishment, to use stimulants, with the view of counteracting this supposed poisoned state of the system. If an undue amount of nourishment is taken, a fair share of it will go to the increase of the disease, and stimulants which are taken to the extent of quickening the circulation will at the same time increase that of the tumor and accelerate its growth. The restriction to a light milk and farinaceous diet has been recommended from early times. A distinguished physician told Mr. de Morgan that his wife had cancer of the uterus; he kept her for a long time on the sparest vegetable diet, just enough to sustain life; the disease disappeared. Years afterwards the cancer reappeared and destroyed her, circumstances having prevented her from observing the same régime as before.

Rest is commonly necessary. But if it be found that moderate exercise, as in driving, does not increase pain or hemorrhage, it is desirable to take it. Physiological rest is the most important. The wise physician will exercise great reserve in enforcing sexual abstinence in the great majority of cases of uterine disease. But in the case of cancer his injunction should be decided. The direct and remote evils produced by intercourse are so great that regard for the patient's safety leaves no doubt as to the necessity of abstinence. Attacks of hemorrhage, even

fatal, have been traced to imprudence in this respect. That the activity of the disease is promoted by it there can be no doubt. And in the not improbable event of pregnancy, the risk encountered is vital.

The internal use of remedies is greatly limited to the fulfilment of special accidental indications. The bowels commonly demand attention. Constipation is a troublesome complication. It must be met by suitable aperients, and by enemata.

Bromine and iodine internally were greatly relied upon by Boinet. Iron seems indicated by the degraded state of the blood. But it is not often well borne. Salines I have found of great service. Bismuth, strychnine, hydrocyanic acid will occasionally be required to allay irritability of stomach. I have seen in many cases remarkable benefit from cod-liver oil.

CHAPTER XXVIII.

THE DISEASES OF THE VAGINA.

COLPITIS (VAGINITIS): SIMPLE, INFECTIOUS, ACUTE, CHRONIC; DISPLACEMENTS; WOUNDS; DILATATION; ATROPHY; CONTRACTION; SYPHILITIC, TUBERCULOUS, CANCEROUS ULCERATIONS; SLOUGHING; CICATRICES; LACERATIONS OF THE CERVIX UTERI; VESICO-VAGINAL AND RECTO-VAGINAL FISTULÆ; RUPTURED PERINEUM; NEW FORMATIONS: FIBROUS TUMORS; SARCOMATA; CYSTIC TUMORS; HÆMATOMA; CALCULI.

SOME of the abnormal conditions of the vagina have been described in the preceding chapters (see Atresia, Leucorrhœa, etc). It will here be necessary to describe those which have received insufficient attention.

Vaginitis or Colpitis.

Acute vaginitis sometimes follows labor, the result apparently of contusion of structures in a state of exalted vascularity. In these cases exfoliation or desquamation of the epithelial layer is very active, so that the bared surface presents a raw velvety-red angry appearance. Even during pregnancy the intense vascularity of the vagina disposes to free shedding of epithelium, which often collects about the summit of the vagina in the form of a creamy pasma, or in shreds or pellicles.

Acute vaginitis may also occur from exposure to cold during a menstrual period, from injury, from direct infection, from the introduction of foreign substances, from the use of irritating powders or injections. In children it may be caused by ascarides, by neglect of cleanliness, by improper manipulation. I have referred to the association of vaginitis with the eruptive fevers. Scarlatina, especially, affects the genito-urinary mucous tract, and thus I have known intense vaginitis produced. The

first case of the kind I saw was that of a young woman in Chomel's wards at the Hôtel-Dieu, in 1840. In these cases there is prolific generation and casting off of epithelium, attended and followed by a severe form of leucorrhœa.

Leucorrhœa in children is not very uncommon, and when observed is sometimes the source of most distressing suspicions. It is therefore eminently necessary to call attention to the fact that children are liable to non-virulent discharges, depending upon accidental causes. The symptoms of vaginitis and vulvitis in children are: in the acute stage, the patient complains at the onset of itching or burning at the vulva. This is increased during micturition. A whitish opaque moisture is formed over the surface of the labia, and these are often redder than in the normal state. The patient has often a difficulty in walking, the friction increasing the irritation of the inflamed surfaces. In the chronic state the discharge is a serous or lactescent moisture; there is little pain in the vulva, but sometimes a dull pain above the pubes, spreading to the groins and inner part of the thighs.

This form of vulvo-vaginitis has been noticed at the time of dentition, from indigestion, from exposure to heat and fatigue—as from dancing—from constitutional diathesis, especially the strumous, resembling in this respect the tumid chronic inflammation of the conjunctiva and nares.

The treatment consists in putting the child in a warm bath every two or three days, applying demulcent lotions, as poppy-head, mallow, or linseed decoctions, or weak acetate of lead, and in regulating the secretions; in the use of iron, iodine, and cod-liver oil.

The most common cause of acute or sub-acute colpitis is *gonorrhœal infection*. In this case the mucous membrane, especially at the fundus of the vagina, is intensely red. There is copious muco-purulent secretion of a yellowish or greenish tint, sometimes tinged with blood. This is found chiefly at the fundus of the vagina, surrounding and bathing the vaginal-portion of the uterus, which is involved in the like condition.

An experienced practitioner will generally recognize the specific character of this inflammation; but it is easy to fall into error in diagnosis. The moral and social complications are at times so intricate, and the reasons for dissimulation on the part of the patients are so strong and various, that even in the presence of the most convincing clinical proof, it will rarely be wise to commit ourselves to a plain expression of opinion. The subjects themselves may, moreover, be perfectly innocent and unconscious of the nature of the affection. And we must not always expect to be dealt with candidly. What we say will perhaps be misinterpreted or misrepresented. A circumspect reticence therefore becomes a virtue and a duty in the physician.

Gonorrhœal colpitis is very apt to invade the cervical canal, and thence to pass into the chronic stage, a condition analogous to gleet in the male. It may spread upwards to the uterus and Fallopian tubes, and thus lay the foundation of an obstinate chronic metritis, and even give rise to peritonitis.

It is also apt to spread along the urethra. This is more frequent, says Guérin, than is commonly thought. Occasionally the orifice of the urethra is inflamed, swollen, dotted with red points or pimples, corresponding to