

toms of acute inflammation of the liver—enlargement of the gland (quite apparent to the eye and confirmed by palpation and percussion), a temperature of 101.4°, a pulse of 120, extreme hepatic tenderness, dorsal decubitus, and a very anxious countenance. The symptoms were such as to warrant the suspicion that an abscess was making its way to the surface. Without hesitation I plunged one of Diculafoy's perforated needles in succession into the most prominent parts of liver, applying the aspirator. I failed to find an abscess, but brought away about four ounces of blood. The result was most striking. The patient experienced immediate and marked relief; the temperature fell; the excessive swelling of the liver subsided in a manner out of all proportion to the quantity of blood extracted; and, under the use of chloride of ammonium, the patient made a very good recovery. It cannot be said that the result was due to the operation of the medicine alone, as the relief experienced was gratefully acknowledged at the time in the presence of the medical officers doing duty in my wards. In yet a third case—one of chronic dysentery, complicated with hepatic symptoms so acute as to lead me to suspect that pus had formed—I pursued the same plan, not for the purpose of withdrawing blood, but in search of a supposed abscess, which was not found; but the withdrawing of about the same quantity of blood by the aspirator was, in like manner, followed by the immediate subsidence of the hepatic symptoms.

GYNECOLOGY.

PALLIATIVE TREATMENT OF MENORRHAGIA FROM INTRAUTERINE TUMOURS.

By DR. ALFRED MEADOWS, London.

Supposing that palliative treatment is required, our attention will probably be directed chiefly to the relief of one or other or all of the three leading symptoms—namely, menorrhagia, irregular discharge of mucus or of blood, and pain. Of these undoubtedly excessive discharge, either at or between the menstrual periods, will be the most common, and probably the most trying and troublesome symptom to treat. Of course I need not say that astringents will under such circumstances be called for; and, among the many that at different times enjoy popularity, it is difficult to select one which shall prove most effectual; indeed, I do not hesitate to declare that there is no single remedy that I know of which can be relied upon with anything like certainty to check the hæmorrhage or arrest the menstrual flow in cases of this sort. I have tried, in turn, most, if not all, the so-called hæmostatics, and I cannot say of any one of them that it has been uniformly successful, or that it has not at times most signally failed. Gallic acid in one case, astringent chalybeates in another—and, of the latter, I know of none that is so effective as peracetate of iron in half-drachm doses; acetate of lead in a third, taking care always, in giving the latter, to do so in solution with the dilute acetic acid; ergot of rye in a fourth, in half-drachm doses, giving this in the recent powder in preference to any other form;—these are, according to my experience, among

the most efficient remedies of this class. But there is one that I have used during the last twelvemonth which certainly seems to me by far the most effective remedy of the kind that we possess: I mean the watery extract or liquor of the common periwinkle—the *extractum vinca major liquidum*, as it is called. This, taken in drachm doses, properly diluted, every four hours, I have seldom known to fail; it is certainly by far the most efficient remedy that I know of for the purpose in question. Why one remedy answers better at one time or in one case better than another I am unable to say; constitutional or local peculiarity may have to do with it; but in any case I can lay down no rule for your guidance, for the whole thing seems to be purely empirical. Of those agents which, while possessing no astringency, have nevertheless proved effective as hæmostatics in some hands, such as digitalis, Indian hemp, turpentine, and mercury, I have no satisfactory opinion to offer, for the reason that they have all in my hands proved utter failures. Of course, where great anæmia exists, a chalybeate astringent would seem the most fitting, but I have on many occasions found it rather increase than diminish the bleeding. The same may be said also of ergot. Dr. McClintock speaks very highly of the hæmostatic properties of mercury, confirming in this respect the experience of Dr. Tanner, who found it a most useful agent for this purpose. I must own that I have never seen such a result. If I were to place the medicines in the order in which I have found them of greatest value, I should assign them as follows: the liquid extract of the common garden periwinkle, the ethereal peracetate of iron, ergot in the form presently to be described, gallic and sulphuric acids with the compound infusion of roses, the acetate of lead with dilute acetic acid, and, in a few rare cases of the congestive kind, the local abstraction of blood by means of leeches to the cervix; these have all, in turns, proved efficient in my hands. As a general rule, I have observed that when hæmorrhage does occur, which is very seldom, in cases of subperitoneal fibroids, it is more easily arrested than in either of the other varieties, and for such the periwinkle, or the chloride of calcium, given perseveringly for months, has been the most successful. In interstitial fibroids the bleeding is more difficult to control, and ergot or rye or borax has proved the most efficient agent in such cases. In the submucous, and still more in the polypoidal forms, the difficulty of arresting hæmorrhage is greater than in either of the others; here the *vinca major* and the more common astringents, such as gallic acid, sulphuric acid, iron alum, or the peracetate of iron, have appeared to answer best.

PHYSIOLOGY.

ACTION OF PEPSIN ON FIBRIN.

Von Wittich (*Pluegers Archiv*, vol. v. 435) finds that the pyloric end of the stomach contains little pepsin and a large quantity of mucus. He extracts the pepsin by means of glycerine, which dissolves it very readily. As the mucus from the pyloric end of the stomach hinders the solution

of the pepsin in glycerine, he recommends that this part of the stomach should be cut off before the rest is laid in glycerine. To get pepsin as free as possible from albuminous substances, he steeps the mucous membrane of the stomach in alcohol for a day or two, and then in glycerine for several days. Pepsin does not give the reactions of albuminous bodies, nor does it putrefy easily as they do, but it resembles them in hardly diffusing into water at all. If a piece of fibrin, however, be put into the water, the pepsin will diffuse into it most readily; and if any remains undissolved in artificial gastric juice, it will take up nearly the whole of the pepsin from it. When the fibrin is then placed in fresh dilute hydrochloric acid, it not only becomes digested itself, but imparts to the acid the power of digesting additional quantities of fibrin. The author considers that pepsin and hydrochloric acid form a chemical compound, which is the active agent in digestion. This, he thinks, is shown by the facts that pepsin with acid diffuses readily, although pepsin alone hardly diffuses at all, and that the pepsin runs off along with the products of digestion, from fibrin digested on a filter. The pepsin and acid probably unite in definite proportions, as digestion will stop if too little acid is present although there may be plenty of pepsin. The quantity of fibrin digested by a fluid in which it is immersed is proportional to the pepsin. Digestion begins more quickly when there is much pepsin, and proceeds most rapidly at a temperature of about 120° Fahr. It will go on, though slowly, at 80° Fahr. The power of pepsin is destroyed by heating a dilute solution of it to 169° Fahr. for two minutes. A strong solution is not destroyed by exposure to a temperature of 189° Fahr. for a similar period. When the gastric juice does not digest the whole of the fibrin in it, the arrest of digestion is due to two causes, the first of these being the want of free acid. A part of the acid which remains undissolved is withdrawn from it during digestion, and so there is not enough left to form the digestive compound with the pepsin which it has absorbed. Digestion cannot go on unless water be present, and it is hindered if the quantity be too small. Another cause of the arrest of digestion is the presence of digestive products, and especially peptones, in the gastric juice. If much pepsin be present, a larger proportion of them is required to stop digestion, and the quantity of peptones formed from the pepsin is increased. Peptones may be formed from fibrin by the action of dilute acid alone.

PRACTICAL MEDICINE.

PULMONARY HÆMORRHAGE AS A CAUSE OF CONSUMPTION.

In a paper read before the Medical Society of the College of Physicians of Dublin, and published in the *Dublin Journal of Medical Science*, Dr. Finny discusses the subject of pulmonary hæmorrhage as a cause of phthisis. He prefaces his remarks by relating the histories of three cases which occurred in his practice, in all of which, as far as could be ascertained by the most careful in-