

ducing rapid absorption of the effused material, preventing inflammation and excessive discoloration. If there be much pain, the officinal lead and opium wash will give relief. A large extravasation of blood should be removed by incising the integument.

### CHAPTER III.

#### HÆMORRHAGE FROM THE UTERUS.

Metrorrhagia. — Accidental Hæmorrhage. — Placenta Prævia. — Post-partum Hæmorrhage.

THE periodical discharge of blood from the uterus, which takes place every twenty-eight days, is a physiological occurrence, and does not require attention here. It rarely calls for active treatment, even when in excess (*menorrhagia*).

METORRHAGIA, or bleeding between the monthly periods, may keep up so constant a drain on the system as to destroy by exhaustion, or predispose to fatal diseases. Congestion of the uterus from chronic inflammation, tumors, ulcers, and abrasions of the cervix, are its principal causes.

The treatment of metrorrhagia consists principally in the application of cold to the hypogastrium, vulva, and neck of the uterus, and the internal administration of ergot, gallic acid, acetate of lead, etc. India-rubber bags, filled with ice-water, introduced into the vagina and pressed against the cervix uteri, may be used with good effect. The diseases causing the hæmorrhage should subsequently be removed, and the patient's strength increased by fresh air, exercise, good diet, and tonics.

ANTE-PARTUM HÆMORRHAGE is that variety which occurs

in the pregnant female before delivery. It is due either to partial separation of the after-birth from blows or falls (*accidental hæmorrhage*), or to placenta prævia. In the latter case, the after-birth is attached around the os internum. The natural dilatation of the cervix and contraction of the uterine fibres at "full term" cause its detachment, and bleeding follows (*unavoidable hæmorrhage*). Placenta prævia is attended with great danger, both to mother and child. It requires to be diagnosed from accidental hæmorrhage. In accidental hæmorrhage, the patient has received a blow or fall on the abdomen, the cervix is not relaxed, and the flow of blood occurs between the uterine contractions. In unavoidable hæmorrhage, the bleeding appears near the time of labor, and is *not* accompanied by a history of injury. The cervix is soft and patulous, the placenta can be felt over the internal os, and the hæmorrhage occurs *with*, and not between, the uterine contractions, as in the former variety.

A patient suffering from accidental hæmorrhage should be kept at rest in the recumbent posture, with the hips elevated. Cold may be applied to the vulva, and astringent medicines given. Some advise small doses of ergot. If these measures do not succeed, premature labor must be induced and the uterus emptied (*see* Puerperal Convulsions).

PLACENTA PRÆVIA is treated in one of four ways: 1. The vagina can be *tamponed*, and the patient kept quiet until labor sets in. The placenta is then removed, totally, and the child's head, pressing against the open vessels, prevents further loss of blood. 2. If the hæmorrhage is profuse, the cervix may be dilated rapidly, the placenta detached as in the first instance, and the child extracted by means of forceps or version. 3. The after-birth may be partially detached

at one side when the os is dilated, and the child delivered by version. 4. An opening may be made in the centre of the placenta, the hand introduced through it, and version performed.

Ergot should be freely administered while the uterus is being emptied. This drug is likewise useful after completion of delivery, in producing perfect tonic contractions of the uterine muscular fibres, and preventing further bleeding.

POST-PARTUM HÆMORRHAGE is one of the most dangerous sequelæ of labor. Perhaps in no other hæmorrhage is there such urgent necessity for presence of mind, or active interference. There are few varieties which so readily yield to proper treatment; yet inferior remedial agents, or a few moments of indecision, may place the patient beyond hope. The stream of blood poured out in the space of half a minute has in some instances been sufficient to destroy life.

Protracted labors which fatigue and lessen the vital forces of the parturient woman, or labors which have been attended by operative procedures, are apt to be followed by profuse bleeding. Neglect on the part of the physician or of his assistant to follow the uterus with the hand down into the pelvis during delivery, and to keep it contracted when there, is one of the most common causes. It is not too much to say that, if this precaution were observed with all patients, a case of immediate post-partum hæmorrhage would be exceedingly rare.

Women habitually subject to inertia uteri are especially liable, even in ordinary labors, to lose large quantities of blood. These cases require extra attention. Injuries to any part of the internal genitals, with laceration, and the

hæmorrhagic diathesis, are also causes of immediate hæmorrhage.

When portions of the after-birth remain behind after delivery of the child, hæmorrhage usually occurs. It does not, however, show itself to any great extent for some days subsequent to the labor. Retained placenta may be suspected in all cases where a few days elapse after delivery before the bleeding manifests itself.

In post-partum hæmorrhage the blood may be effused into the cavity of the uterus, or, as is generally the case, it may be poured out through the vagina.

The first indication of hæmorrhage which may attract the attention of the attendant, especially if the woman be covered or the bleeding internal, will be a sudden blanching or pallor of the patient's countenance, and sighing respiration. The pulse becomes rapid and weak, or may be completely absent. In short, all the constitutional symptoms of profuse hæmorrhage are present (*see* page 12). In another class of cases the bleeding is slower, the constitutional effects less suddenly manifested; but in all they appear to a greater or less degree.

*Treatment.*—The preventive treatment consists in pressing the uterus firmly down into the pelvic cavity as it is being emptied of its contents, and to keep the hand over it until it is felt to be contracted like a hard ball in the pelvic cavity. Some recommend the administration of ergot before and after the delivery of the placenta, as a preventive measure. I administered it quite frequently for that purpose in the Lying-in Department of Bellevue Hospital, and with good results.

For suppressing the hæmorrhage, several methods are

advised. When the bleeding is very profuse, the surest method is to introduce one hand into the uterus, turning out all the clots, while at the same time the other hand grasps the organ on the outside, and firm pressure is made until the hand is forced out by the uterine contractions. A piece of ice may be carried into the cavity, and applied to the internal surface of the uterus, if necessary. The physician must be governed by circumstances in its use. There are cases which cannot be controlled without it. Some object to the introduction of the hand into the uterus, because they think it apt to injure the walls, produce endo-metritis and other disorders. This danger is probably somewhat exaggerated. The pressure of the closed hand for a few moments on the inner surface of the contracting uterus will certainly not produce greater harm than the pressure on the irregular prominences of the child's body during a labor of several hours' duration. The only danger there can be is from septic material finding its way inside on the hands of the physician, and this, to say the least, is very improbable.

Another method is to grasp the uterus firmly and knead it with the fingers until contractions ensue. Lumps of ice may be rubbed over the abdomen at the same time, or ice-water poured on the abdominal walls.

Prof. Thompson, of this city, claims to have obtained good results from the application of ether-spray over the hypogastrium. Injections of astringent medicines into the cavity of the uterus have been employed, but are considered extremely dangerous by most obstetricians. In conjunction with all the varieties of local treatment mentioned, ergot should be administered in large doses at repeated intervals. Its use is always indicated. The subsequent treatment

depends on the amount of blood lost. If there be much exhaustion, the usual stimulants, together with small doses of opium, may be given; and, as a last resort to save from impending death, the operation of transfusion, referred to in a former chapter, may be employed. Injections of hot water have also been employed with great advantage.

## CHAPTER IV.

### WOUNDS OF IMPORTANT ORGANS.

Wounds of the Throat, Lungs, Pericardium, Heart, Abdomen, Intestines, Bladder, Perineum, Joints, Arteries, Veins.—Perineal Section.—Paracentesis, Thoracis.—Gunshot Wounds, etc.

WOUNDS of the throat vary in extent, from simple incision of the integument to complete severance of the larynx, trachea, and œsophagus. They are inflicted with razors or other sharp cutting instruments, and are usually the result of attempted self-murder. The upper part of the throat seems to be the point of selection in these cases: rarely is the cut made at the lower portion. The carotid artery and jugular vein are thus saved, and a better chance of recovery given to the patient.

In the majority of wounds of the throat an opening is made into the air-passages. The most common seat of these wounds is between the thyroid cartilage and hyoid bone, and over the larynx. In the former the thyro-hyoid membrane is cut through; the epiglottis may be cut off, or injured so as to seriously affect the power of swallowing. The food may pass without hinderance into the larynx and out of the external opening, as the epiglottis is not in place to prevent it, or is in a semi-paralytic condition from the injury, and fails to appreciate, or prevent the passage of the food down the wrong canal. The appearance of food in the