CHAPTER XIV.

HEMORRHAGE FROM SEPARATION OF A NORMALLY SITUATED PLACENTA.

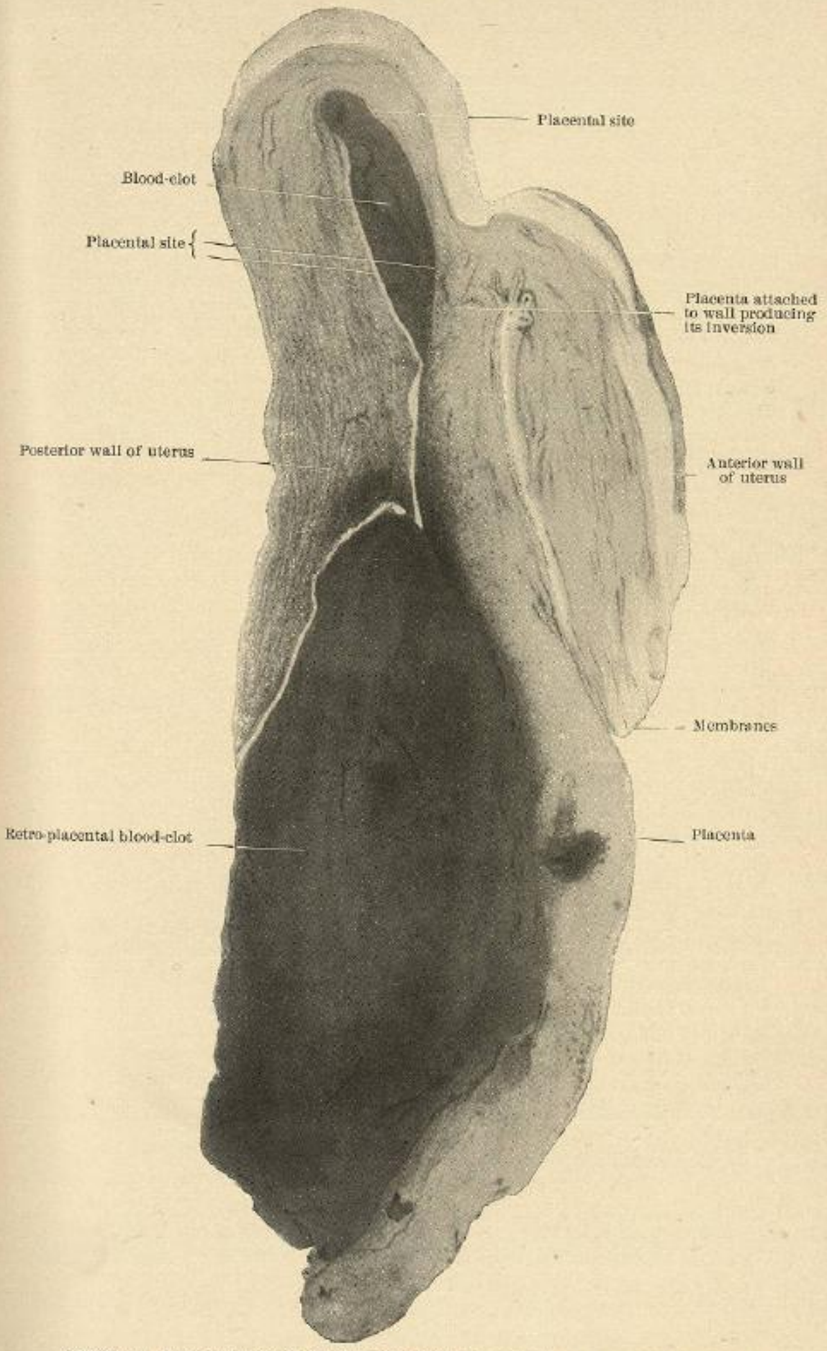
Definition.—This is the form of hemorrhage which is generally described in obstetric works as *accidental*, in contradistinction to the *unavoidable* hemorrhage of placenta prævia. In discussing the latter we have seen that the term "accidental" is one that is apt to mislead, and that the causation of the hemorrhage in placenta prævia is, in some cases at least, closely allied to that of the variety of hemorrhage we are now considering.

When, from any cause, separation of a normally situated placenta occurs before delivery, more or less blood is necessarily effused from the ruptured utero-placental vessels, and the subsequent course of the case may be twofold: 1. The blood, or at least some part of it, may find its way between the membranes and the decidua, and escape from the os uteri. This constitutes the typical "accidental" hemorrhage of authors. 2. The blood may fail to find a passage externally, and may collect internally (see Plate IV.), giving rise to very serious symptoms, and even proving fatal, before the true nature of the case is recognized. Cases of this kind are by no means so rare as the small amount of attention paid to them by authors might lead us to suppose; and, from the obscurity of the symptoms and difficulty of diagnosis, they merit special study. Dr. Goodell[1] has collected no less than 106 instances in which this complication occurred.

Causes and Pathology.—The causes of placental separation may be very various. In a large number of cases it has followed an accident or exertion (such as slipping down stairs, stretching, lifting heavy weights, and the like) which has probably had the effect of lacerating some of the placental attachments. At other times it has occurred without such appreciable cause, and then it has been referred to some change in the uterus, such as a more than usually strong contraction producing separation, or some accidental determination of blood causing a slight extravasation between the placenta and the uterine wall, the irritation of which leads to contraction and further detachment. Causes such as these, which are of frequent occurrence, will not produce detachment except in women otherwise predisposed to it. It generally is met with in women who have borne many children, more especially in those of weakly constitution and impaired health, and rarely in primiparæ. Certain constitutional states probably predispose to it, such as albuminuria or exaggerated anæmia; and, still more so, degenerations and diseases of the placenta itself.

[1] Amer. Journ. of Obstet., 1869-70, vol. ii. p. 281.

PLATE IV.



VERTICAL MESIAL SECTION OF UTERUS WITH PLACENTA PARTIALLY ATTACHED—from a case of abdominal section for hemorrhage during labor. After BARBOUR.

(*To face page 430.*)

This form of hemorrhage rarely occurs to an alarming extent until the later months of pregnancy, often not until labor has commenced. The great size of the placental vessels in advanced pregnancy affords a reasonable explanation of this fact.

Symptoms and Diagnosis.—If, after separation of a portion of the placenta, the blood finds its way between the membranes and the decidua, its escape *per vaginam*, even although in small amount, at once attracts attention, and reveals the nature of the accident. It is otherwise when we have to deal with a case of concealed hemorrhage, the diagnosis of which is often a matter of difficulty. Then the blood probably at first collects between the uterus and placenta. Sometimes marginal separation does not occur, and large blood-clots are formed in this situation, and retained there. More often the margin of the placenta separates, and the blood collects between the membranes and the uterine wall, either toward the cervix, where the presenting part of the child may prevent its escape, or near the fundus. In the latter case especially, the coagula are apt to cause very painful stretching and distention of the uterus. The blood may also find its way into the amniotic cavity, but more frequently it does not do so; probably, as Goodell has pointed out, because, "should the os uteri be closed, the membranes, however delicate, cannot, other things being equal, rupture any sooner from the uterine walls, for the sum of the resistance of the enclosed liquor amnii being equally distributed exactly counter-balances the sum of the pressure exerted by the effusion." This point is of some practical importance, because, after rupture of the membranes, the liquor amnii is frequently found untinged with blood, and this might lead us to suppose ourselves mistaken in our diagnosis, if this fact were not borne in mind.

The most prominent symptoms in concealed internal hemorrhage are extreme collapse and exhaustion, for which no adequate cause can be assigned. These differ from those of ordinary syncope, with which they might be confounded, chiefly in their persistence and severity, and in the presence of the symptoms attending severe loss of blood, such as coldness and pallor of the surface, great restlessness and anxiety, rapid and sighing respiration, yawning, feeble, quick, and compressible pulse. When there is severe internal, with slight external, hemorrhage, we may be led to a proper diagnosis by observing that the constitutional symptoms are much more severe than the amount of external hemorrhage would account for. Uterine pain is generally present, of a tearing and stretching character, sometimes moderate in amount, more often severe, and occasionally amounting to intolerable anguish. It is often localized, and, doubtless, depends on the distention of the uterus by the retained coagula. If the distention be marked, there may be an irregularity in the form of the uterus at the site of sanguineous effusion; but this will be difficult to make out, except in women with thin and unusually lax abdominal parietes. A rapid increase in the size of the uterus has been described as a sign by Cazeaux and others. It is not very likely that this will be appreciable toward the end of utero-gestation, as a very large amount of effusion would be necessary to produce it. At an earlier period of

pregnancy, at or about the fifth month, I made it out very distinctly in a case in my own practice. It obviously must have occurred to an enormous extent in a case related by Chevalier, in which post-mortem Cæsarean section was performed under the impression that the pregnancy had advanced to term, but only a three months' fœtus was found, imbedded in coagula which distended the uterus to the size of a nine months' gestation.[1] Labor pains may be entirely absent. If present, they are generally feeble, irregular, and inefficient.

Differential Diagnosis.—The only condition, beside ordinary syncope, likely to be confounded with this form of hemorrhage, is rupture of the uterus, to which the intense pain and profound collapse induce considerable resemblance. The latter rarely occurs until after labor has been some time in progress, and after the escape of the liquor amnii; whereas hemorrhage usually occurs either before labor has commenced, or at an early stage. The recession of the presentation, and the escape of the fœtus into the abdominal cavity, in cases of rupture, will further aid in establishing the diagnosis.

Prognosis.—The prognosis, when blood escapes externally, is, on the whole, not unfavorable. The nature of the case is apparent, and remedial measures are generally adopted sufficiently early to prevent serious mischief. It is different with the concealed form, in which the mortality is very great. Out of Goodell's 106 cases, no less than fifty-four mothers died. This excessive death-rate is, no doubt, partly due to the fact that extreme prostration often occurs before the existence of hemorrhage is suspected, and partly to the accident generally happening in women of weakly and diseased constitution. The prognosis to the child is still more grave. Out of 107 children, only six were born alive. The almost certain death of the child may be explained by the fact that, when blood collects between the uterus and the placenta, the fœtal portion of the latter is probably lacerated, and the child then also dies from hemorrhage.

Treatment.—In this, as in all other forms of puerperal hemorrhage, the great hæmostatic is uterine contraction, and that we must try to encourage by all possible means. The first thing to be done, whether the hemorrhage be apparent or concealed, is to rupture the membranes. If the loss of blood be only slight, this may suffice to control it, and the case may then be left to Nature. A firm abdominal binder should, however, be applied to prevent any risk of blood collecting internally, as there is nothing to prevent its filling the uterine cavity after the membranes are ruptured. Contraction may be further advantageously solicited by uterine compression, and by the administration of full doses of ergot. If hemorrhage continue, or if we have any reason to suspect concealed hemorrhage, the sooner the uterus is emptied the better. If the os be sufficiently dilated, the best practice will be to turn without further delay, using the bi-polar method if possible. If the os be not open enough, a Barnes bag should be introduced, while firm pressure is kept up to prevent uterine accumulation. Should the collapsed condition of the patient be very marked,

[1] Journ. de Méd. Clin. et Pharm., tom. xxi. p. 363.

the mere shock of the operation might turn the scale against her. Under such circumstances it may be better practice to delay further procedure until, by the administration of stimulants, warmth, etc., we have succeeded in producing some amount of reaction, keeping up, in the meanwhile, firm pressure on the uterus. Should the head be low down in the pelvis, it may be easier to complete labor by means of the forceps.

CHAPTER XV.

HEMORRHAGE AFTER DELIVERY.

Its Importance.—Hemorrhage during, or shortly after, the third stage of labor is one of the most trying and dangerous accidents connected with parturition. Its sudden and unexpected occurrence just after the labor appears to be happily terminated, and its alarming effect on the patient, who is often placed in the utmost danger in a few moments, tax the presence of mind and the resources of the practitioner to the utmost, and render it an imperative duty on everyone who practises midwifery to make himself thoroughly acquainted with its causes, and preventive and curative treatment. There is no emergency in obstetrics which leaves less time for reflection and consultation, and the life of the patient will often depend on the prompt and immediate action of the medical attendant.

Frequency of Post-partum Hemorrhage.—Post-partum hemorrhage is one of the most frequent complications of delivery. I do not know of any statistics which enable us to judge with accuracy of its frequency, but I believe it to be an unquestionable fact that, especially in the upper ranks of society, it is very common indeed. This is probably due to the effects of civilization, and to the mode of life of patients of that class, whose whole surroundings tend to produce a lax habit of body which favors uterine inertia, the principal cause of post-partum hemorrhage. In the report of the Registrar-General for the five years from 1872 to 1876, 3524 deaths are attributed to flooding. The majority of these must have been caused by post-partum hemorrhage, although some may have been from other forms.

Fortunately, it is, to a great extent, a preventable accident. I believe this fact cannot be too strongly impressed on the practitioner. If the third stage of labor be properly conducted, if every case be treated, as every case ought to be, as if hemorrhage were impending, it would be much more infrequent than it is. It is a curious fact that post-partum hemorrhage is much more common in the practice of some medical men than in that of others; the reason being that those who meet with it often, are careless in their management of their