several miles, and go upstairs without discomfort. The superficial vessels were much less distinct, and the skin looked healthy. The respiratory and cardiac sounds were normal, and the pulse was full and regular.

REMARKS.—The complete relief of all the chest-symptoms is the main point of interest in the case. The condition of the patient before the operation was certainly very critical. The weight of the tumour embarrassed the respiration, and prevented due expansion of the chest. Cardiac failure was, however, the great source of danger. The heart was greatly taxed in sustaining the circulation, and the serious retardation of the venous current was evident from the distension of the veins, and the chronic obstruction of the pulmonary system. The absence of marked valvular insufficiency and renal complication rendered the result of operative interference fairly favourable. Ether was carefully administered during the operation, and repeated hypodermic injections were employed to relieve the urgent symptoms of cardiac failure.

REMARKS ON THE TREATMENT OF PLACENTA PRÆVIA.

Read in the Section of Obstetric Medicine.

By JAMES MURPHY, M.D., B.A.,

Surgeon to the Hospital for Women and Children, Sunderland.

THE number of cases in the table which has been shown is fifteen; in all the mothers recovered completely, and, with one exception, rapidly; the exception being with case No. 4, who was attacked with phlegmasia alba dolens, which rendered her recovery very tedious.

Of the children, five were born alive; of these, two died within a few hours, the remaining three doing well. Thus, one in three was born with life; but only one in five ultimately survived. This is, no doubt, a high mortality, but several of the cases were not seen till after the death of the child. In case No. 10, the foetus was dead and putrid; in cases Nos. 2, 4, and 5, the foetus was found to be dead when the patient was first examined; and in cases Nos. 3 and 14, the early stage of pregnancy sufficiently accounts for the result. Thus, while all the deaths may fairly be said to be due to the placental presentation, where there was a chance of treatment only four children were lost of nine cases, and of these three survived, three out of a possible nine.

This is in accordance with the experiences of most men, that the fatality of mothers and children in placenta prævia is not due so much to the impotence of our art, as it is to fatal hæmorrhage taking place before professional assistance has been obtained, or where that assistance has been of a helpless do-nothing character. Therefore, when we know that the placenta is presenting, in every case where the child is fairly viable (after the seventh month), the fatal hæmorrhage may ensue at any moment; and, by inducing labour, this can be prevented to a very great extent; and we have the opportunity of being present when our help is of vital importance to the patient and her offspring. The experience of those who advocate this mode of procedure, fully confirms its soundness. Dr. Gaillard Thomas reports eleven cases with one death from *post partum* hæmorrhage, and one from puerperal fever. Out of my fifteen cases, none of the mothers died. Hecker lost but three cases in forty; Hoffman, two cases in thirty; Barnes, up to 1864, had sixty-two cases with six deaths, and had a remarkable run of twenty-nine cases without a fatal issue; and Spiegelberg had four deaths in seventy-four cases, from hæmorrhage, and eight from other causes; while Lusk puts down the usual mortality, from hæmorrhage alone, at 25 per cent.; and Müller, of Stuttgart, who published, in 1877, an account of 1,574 cases collected from various sources, estimates the percentage of maternal deaths of all causes at about 40.

In the majority of cases, we have warning that the placenta is presenting, from the hæmorrhages that take place towards the end of pregnancy. These were formerly supposed to be due to the cervix casting off the placenta in the act of its being taken up and expanded during the last months of pregnancy. With a few exceptions, however, most writers have abandoned this theory, for the good and sufficient reasons, first, that the cervix does not expand so early as the floodings occur, or, indeed, until very near the end of pregnancy; and, secondly, that the placenta is never attached to the cervix. Dr. Barnes then suggested that the floodings occurred from detachment of the placenta, arising from an excess in rate of growth of the placenta over that of the cervical zone, a structure which was not designed for placental attachment, and which is not fitted to keep pace with the placenta. Hence, the placenta shoots beyond its site, and hæmorrhage results. Now, great as is my respect for Dr. Barnes, I very much doubt if hæmorrhage ever occurs from this cause. The idea that the placenta shoots beyond its site is purely hypothetical, and would apply to normally situated placenta as well; and, though I carefully looked for it, I never found atrophy, or other indication of its having occurred, in any of the cases recorded. Further, the bleeding would be more likely to occur at the circumference than at the centre, and would be placental, and not uterine, which Dr. Barnes alleges not to be the case. I have no doubt that bleeding occurs from the four causes stated by Dr. Matthews Duncan; namely, either by rupture of an utero-placental vessel, or marginal utero-placental sinus, by partial separation of the placenta from accidental causes, such as a jerk or fall, or in consequence of uterine pains from miscarriage commencing, but being arrested at an early stage. But, if we consider that contractions are frequently taking place in the uteri of pregnant women, and that these contractions have more or less of a shrinking effect on the normally placed placenta, and have a decidedly expanding effect on the placenta placed over the os, we readily perceive how liable an utero-placental vessel or sinus is to be opened, or even a portion of the placenta itself detached. Whatever be the cause, certain it is that such hæmorrhages occur with great frequency towards the end of pregnancy. When they occur early, they generally lead to abortion, which is generally not more serious than abortion from other causes, and thus supply their own treatment. Hæmorrhages occurring later, but previously to the seventh month, are, as a rule, not serious, as in Müller's cases no death occurred before the seventh month; and he finds that bleeding occurs in cases of complete placental presentation in the greatest frequency from the twenty-eighth to the thirty-sixth week, and, in cases of the incomplete form, more frequently after the thirty-second week. These bleedings should be taken as a serious warning; as, though occasionally they may be slight, still not unfrequently the next hæmorrhage may prove a fatal one; and hence, as I have before urged, when the child is fairly viable, and the diagnosis of placenta prævia established, the sooner labour is induced, the safer for both mother and child.

Then comes the question, How is labour to be induced? or, having commenced, how is it to be conducted? To save unnecessary repetition, I may here state that the operation is the same in principle, whether labour have already begun or not; and differs only in application in the manner suited to each stage. Now, with

Table of Fifteen Cases of Placenta Prævia.

Number of Case.	Patient's Age.	Number of Pregnancy.	Usual Medical Attendant.	When first seen.		Month of Pregnancy when hæmorrhage first occurred.	Amount and Duration of Hæmorrhage before Treatment.	State of Os when first seen.	Presentation of		Treatment.	Result to		Date.
				Month of Pregnancy	Condition.				Placenta	Fœtus.		Mother.	Child.	
127	3rd		Midwife	6½	Very faint	6½	Very severe for three hours	Closely contracted	Marginal	Head	Dilatation of os; separation of placenta; version	Recovered	Dead.	Dec. 4, 1877
239	4th		Dr. G. Welford	8½	Extreme collapse; convulsions from loss of blood	8	Enormous loss after labour commenced; had three floodings previously	Fully dilated	Complete	"	Hand passed by side of placenta; foot immediately seized; version	"	"	Mar. 12, 1878
335	6th		Dr. Berwick	5	Pale, and very faint	5	Severe flooding for two hours	"	"	"	Labour-pains very violent, which rapidly expelled both placenta and fœtus naturally	"	"	Sept. 14, 1878
*432	7th		Midwife	Last	Completely blanched, and in an extreme state of collapse	7½	Great loss on commencement of labour; two previous floodings	Size of florin; easily dilatable	"	"	Barnes's bags; separation of placenta; version	"	"	Mar. 5, 1879
537	11th		Dr. Maling	Last	Great faintness	7½	Great loss intermittently for three days while labour was going on; four previous floodings	Dilated fully	"	"	Hand passed by side of placenta; foot seized; version	"	"	Sept. 28, 1879
642	1st		Dr. Morgan	Last	Fairly good	8½	Slight hæmorrhage on commencement of labour; two previous floodings	Size of shilling; very rigid and unyielding	"	"	Barnes's bags; dilatation very slow; separation of placenta; Tarnier's forceps first, then Barnes's forceps	"	"	Mar. 25, 1881
726	3rd		"	Last	Very good	8	"	Size of half-a-crown dilatable	Partial	"	Barnes's bags; dilatation rapid; separation of placenta; pains strong, and labour quickly completed naturally	"	Recovered	Mar. 31, 1881
834	5th		Dr. Murphy	Last	"	Last	A sudden and severe gush of hæmorrhage occurred an hour before I saw her	Size of shilling, and dilatable	Complete	"	Barnes's bags; separation of placenta; forceps	"	Dead	June 21, 1882
7932	7th		"	Last	"	"	Severe on commencement of labour; no previous flooding	Size of shilling, rather rigid	Partial	"	Digital dilatation; separation of placenta; version	"	Alive; died in 6 hours	Aug. 1, 1882
1037	14th		Dr. Maling	6	Very faint, and blanched	4½	Hæmorrhage had been going on, more or less severely, for previous six weeks	Would admit tip of finger; rather rigid	Complete	Breech	Barnes's bags; separation of placenta; all hæmorrhage ceased; foot brought down; fœtus dead and putrid; traction	"	Dead	Oct. 20, 1882
1132	4th		Dr. Bernard	8½	Very good	8	Once, a fortnight before; no recurrence	Would admit tip of finger; dilatable	"	Head	Labour induced by digital dilatation; afterwards Barnes's bags; separation of placenta; version	"	Recovered	Nov. 1, 1882
1243	7th		"	7	Blanched	6½	More or less continuous for a fortnight	Would scarcely admit tip of finger; dilatable	"	"	Same as last case; version	"	Alive; died in 1 hour	Feb. 6, 1883
1337	7th		Midwife	Last	Fairly good	8	Slight; one previous flooding	Size of florin; dilatable	Marginal	Breech	Barnes's bags; separation of placenta; version	"	Recovered	Mar. 2, 1883
1420	1st		Dr. Murphy	5	Very faint	6	Very severe for four hours	Size of florin; dilatable	Shoulder	"	Digital dilatation; separation of placenta; version	"	Dead	Mar. 8, 1883
1540	9th		Dr. Beattie	8	"	—	Very severe for two hours; one previous flooding	Size of half-a-crown dilatable	Complete	Head	Barnes's bags; separation of placenta, which was pushed to one side; forceps	"	"	Apr. 26, 1883

* Phlegmasia alba dolens.

† Narrow conjugate diameter; version performed in all labours; only one other child born alive.

all due respect for the authorities who recommend it, I would suggest that the day of the vaginal plug is gone; that it is now as unscientific in principle as it was uncertain and unsafe in practice; and that the rupture of the membranes is not such an easy matter in some cases, and, besides, is very unreliable in stopping hæmorrhage, and interferes with the easy and rapid performance of version, should that be afterwards deemed advisable. What is required is a measure that will restrain the flow of blood, and, at the same time, shorten labour; and that is best supplied by means of Barnes's hydrostatic bags—or, as I prefer, by Steele's modification of them. In a few cases, resort to the preliminary introduction of the sponge-tent or tupelo-tent may be necessary; but, in the majority, with patience and gentle pressure, the finger can be introduced, and thus prepare the way for the smallest-sized bag. Dr. Barnes has pointed out that there is a natural spontaneous arrest of hæmorrhage attained when that part of the placenta which has grown within

the lower zone has been detached, provided uterine contractions concur; and, though he does not give the reason for it, I would suggest that it is this. While the placenta lines the inside of the uterus, and is attached to it, the slight separation which necessarily takes place on the expansion of the os, causes the connecting vessels to be put on the stretch; and, while thus stretched, if partially ruptured, they cannot contract; hence the continuance of the bleeding. But, when the placenta is separated to the extent Dr. Barnes mentions, it becomes flaccid; and does not drag on the vessels, and, therefore, permits them to contract, which they readily do, provided the uterus be contracting. Hence it is advisable to pass in the finger, and separate the placenta well round the os, sufficiently to permit this flaccidity to occur; if the uterus contract well, hæmorrhage will now cease; but if it go on, ergot should be given. I invariably give this in all cases of placenta prævia, but, if possible, wait till a later stage, so that it may act with the removal of the

foetus. If all go on well, it is best to proceed gently to fully dilate the os, without using any undue amount of force, though, in the event of hæmorrhage, it may be necessary to deliver before the os is fully dilated; and, when it is well dilated, if the pains be rapid and strong, the membranes, if not previously ruptured, may be torn, and the case left to nature, as in cases Nos. 3 and 7. Such cases, however, are exceptional; and, as a rule, it will be desirable to expedite matters, as the partial separation of the placenta has an asphyxiating effect on the foetus, and the sooner it is born the better. The means to be employed will depend on circumstances. If the head be within reach, the forceps may be used, as was the case in three of my cases; more generally, version will be found suitable, simple traction being used in one breech-case.

To sum up: In all cases of placenta prævia after the seventh month, labour should be induced, and previously to that, if the flooding be frequent or severe; labour should be induced by dilatation of the os, the placenta separated sufficiently to permit flaccidity, and the dilatation proceeded with to the full extent. If not contra-indicated, ergot should then be given, and the child removed by the most rapid and gentle method. Such are the remarks I have to present on the treatment of placenta prævia; and, while they contain nothing particularly novel or original, and fifteen cases are too few to dogmatise on, still they are sufficient to fairly test a method which I have hitherto found successful, and I trust I have stated the line of treatment clearly and distinctly, so as to leave no room for hesitation for those who will follow it when called upon to act.

In all the cases, as soon as the placenta was separated sufficiently, the hæmorrhage ceased completely, or became so very trivial as to be of no consequence.

P.S.—Since the Liverpool meeting in August, two more cases have come under treatment (making a total of seventeen); in each, labour was induced at the eighth month; both mothers recovered rapidly, and both children were born alive, one of which survives. For these cases, I am indebted to Drs. Fell and Beattie.

ON THE UNITY OF POISON IN DISEASES.

Read in the Section of Public Medicine.

By G. DE GORREQUER GRIFFITH, L.R.C.P.,

Founder of, and late Senior Physician to, the Hospital for Women and Children.

In the brief space necessarily allotted each member, it would not be possible for me to do more than give a very short summary of this subject.

In the year 1875, I first called attention to the fact, that what is termed scarlatina occurring in the puerperal is frequently not scarlatina at all. But, before I proceed further, I must explain what I mean. I hold that there are two forms of scarlatina: the orthodox—viz., that contracted from a previously affected person, or something infected thereby—and the septicæmic, or toxæmic—viz., that which is evolved or generated *de novo*, as a result of autogenetic blood-poisoning, such as occurs in puerperal cases, or is evolved as a consequence of hetero-genetic blood-poisoning, such as arises (where no scarlatina had existed before) from drains, sewers, imbibition or ingestion of deleterious articles of drink—water, milk, cream, etc.—or of food; and from decomposing animal or vegetable substances. This toxæmic or septicæmic scarlatina, which is evolved from the above causes, is identical with the “surgical scarlatina” of Paget; and will, on strict investigation, be found to be the form of scarlatina which more usually prevails among puerperals. In saying, “It is not scarlatina at all,” I mean it is not the orthodox—namely, that which is recognised by all the profession; and is, as all agree, contracted from a previously infected person or thing.

While carrying on this investigation, I was struck with the unity of origin in cases of puerperal fever, and typhoid also; and, in pursuing the inquiry, found how, from the same source, there would spring erysipelas; scarlatina, typhoid, puerperal, and diphtheria fevers; sore umbilicus in infants, sore eyes, sore mouth, and sore throats, embracing a very wide area of inflammation and inflammatory conditions of palate, tonsils, pharynx; and, passing still further on in the respiratory tract, the larynx, the bronchi, the pleuræ, or the pleuræ and lung, would be found involved; so that toxæmic or septicæmic laryngitis, bronchitis, pleurisy, pneumonia, and pleuropneumonia, attacking a variety of persons, may all, as in the case of the other forenamed ailments, viz., toxæmic, typhoid, etc.—as I call them to distinguish them from the orthodox—

be traced to the same causes; as could also hepatitis, diarrhoea, dysentery, cholera, enteritis, hæmorrhoids, and a large number of affections hitherto considered to be utterly distinct, and having no connection with each other, no point in common, no place where all meet together, because they diverge so much afterwards. Hence I formulated, as a heading to my papers, unity (as regards origin) of poison in the diseases I have just enumerated, and in many others, usually considered to be separate and entirely distinct.

This unity and differentiation in the course of evolution is now recognised by many medical men. Moreover, I found one disease (I adhere to the current word), or, as I term it, one set of symptoms, to be evolved from another, in some cases so far apart in nosological arrangement as to be said to be wholly and entirely distinct, distinct even to specificity; and a number of nosologically divided diseases (sets of symptoms) to be evolved from the one unity-point, the one common ancestry—differentiated no matter how widely, as they actually become, afterwards. I have, therefore, extended the formulated heading into “Unity of poison in diseases usually considered to be separate and entirely distinct; and the evolution of one from another apparently quite distinct, and of many diseases—seemingly all different—from one unity or common origin;” evolution from this unity leading to differentiations. Further, I recognise that symptoms occurring in the course of an affection, say such as scarlatina, symptoms which ordinarily are termed “complications,” may become primary motors of disease, originating a fresh epidemic, it may be—fresh, inasmuch as it would differ from that in the course of which it was itself evolved. For example: Diphtheria not unfrequently is met with as a “complication” of scarlatina (I would say it was part and parcel of the scarlatina), which, in this instance, would be spoken of as the primary disease, the other as being secondary; this latter would be conveyed to a number of persons, even to such a number, it may be, as to constitute an epidemic, spreading fast from one to another. Then this diphtheria would cease to propagate itself, or would cause something quite different to be evolved, or would cause diphtheria to be evolved in the persons exposed, or in the course of these evolutions it would hark back to that which set it agoing—viz., scarlatina; or there would originate or evolve, in a number of the exposed, certain other symptoms, usually considered sequelæ, but not actually part of the scarlatina; so that another outburst of something, seemingly altogether different from scarlatina and diphtheria, would take place, to cause perhaps another new evolution; or, again, to hark back to scarlatina or diphtheria, or both combined, as it would be termed; or would, as it were, leap forward and cause to be evolved, in a certain number of cases, a very ulterior sequelæ of scarlatina—say rheumatism, or rheumatic fever, and heart and pericardial affections; or the latter *per se*; or, it may be, nephritis (the scarlatinal form) would be evolved, without any other intermediate symptoms being noticed, or any pre-existing warnings having been detected, or indeed been noticeable or detectable, such a form of nephritis as would be infectious—infective nephritis, I would call it—inasmuch as it has the power to set up scarlatina, or diphtheria, or any other ailment or group of symptoms coming within the range of its infectivity. In this way, new sets of symptoms may be evolved, new outward manifestations of the inward workings or evolution, a new disease in fact, as would be said in current medical phraseology. In this I am fortified by the Bradshaw Lecture of Sir James Paget, and his and Sir William Gull’s addresses on “Collective Investigation of Disease.”

By unity of poison, I would beg my hearers to bear in mind I mean, not that the poison is always the same, but that the one poison—the one *origo mali*—whatever it may be, will originate several so-called different affections—widely different seemingly, widely different they would be spoken of, widely different even to be considered in every respect “specific.”

¹ See Dr. Sansom’s recent Lettsomian Lectures, in which is confirmation of this.

A LITTLE KNOWLEDGE.—A candidate at a recent examination for a scholarship under the School Board is reported to have made the following statement concerning the process of digestion: “The food passes through the liver, and evaporates by means of little holes called capillaries.” The examiner who published the answers suggests that this novel theory had its origin in the study of some cheap diagram of the digestive system. Knowledge of this kind is indeed a dangerous thing, and worse than conscious ignorance. There is a simple ignorance, and there is a compound ignorance, that is, there are people who are ignorant and know that they are; and there are people who are ignorant and think they know. The latter only are a dangerous class.