

times among 313; Malgaigne, 10 times among 2328; consequently, they are in the mean  $\frac{1}{170}$  of the total.

Following the proportional numbers of the three sets of statistics, the frequency of breaking, as regards the different bones, is the following:—

Both bones of leg, . . . . .	$\frac{1}{4}$	Tibia, . . . . .	$\frac{1}{6}$
Femur, . . . . .	$\frac{1}{4}$	Patella, . . . . .	$\frac{1}{68}$
Ribs, . . . . .	$\frac{1}{3}$	Metacarpus, . . . . .	$\frac{1}{84}$
Fore-arm, . . . . .	$\frac{1}{10}$	Mandibula, . . . . .	$\frac{1}{84}$
Radius, . . . . .	$\frac{1}{11}$	Olecranon, . . . . .	$\frac{1}{128}$
Clavicle, . . . . .	$\frac{1}{13}$	Vertebræ, . . . . .	$\frac{1}{133}$
Humerus, . . . . .	$\frac{1}{17}$	Bones of the Toes, . . . . .	$\frac{1}{170}$
Cranium, . . . . .	$\frac{1}{19}$	Pelvis, . . . . .	$\frac{1}{202}$
Fibula, . . . . .	$\frac{1}{25}$	Scapula, . . . . .	$\frac{1}{230}$
Bones of the Face, . . . . .	$\frac{1}{28}$	Tarsus, . . . . .	$\frac{1}{300}$
Bones of the Fingers, . . . . .	$\frac{3}{11}$	Metatarsus, . . . . .	$\frac{1}{300}$
Ulna, . . . . .	$\frac{1}{11}$	Sternum, . . . . .	$\frac{1}{410}$

ART. XIII.—*Cases in Midwifery from Dispensary and Private Practice. With Remarks.* By T. PUREFOY, M.D., &c., Lucan.

#### EIGHT CASES OF ARM PRESENTATION.

CASE I.—IN this case the fore-arm and cord presented without the os externum for a period of fifteen hours before the patient was first visited, when she was found weak and exhausted, and without any labour pains. There were tenderness of the abdomen, tympanitis, thirst, fever, with a dry and heated state of the vagina. Delivery was easily effected by turning the child; yet all the bad symptoms increased progressively until the fourth day, when the patient died.

CASE II.—Mrs. H., in labour during thirty hours before visit: young, healthy, and well made. The left arm is completely protruded at the os externum, and much swollen, whilst the shoulder is firmly impacted at the brim of the pelvis. The pains are powerful; but there are not any alarming constitutional symptoms present. An opiate was given, and, when its effects were manifested, an attempt was made to turn the child, but in vain, as the introduction of the hand was prevented by violent uterine contraction; the opiate was repeated, sixty drops of the acetum opii having been given within the lapse of two hours. Sound sleep was induced; the operation again cautiously undertaken, which proved at

once difficult, tedious, and very painful to the patient, in consequence of continued active uterine contraction resisting the movements of the hand in utero, and so prolonging the operation for a period of nearly two hours. No unpleasant symptom followed until the third day, when indications of cerebral apoplexy arose, which yielded to free bleeding from the arm, purgatives, and the use of mercury.

CASE III.—Mrs. H. again attended, under precisely similar circumstances; delivered by turning the child, which was still-born, as in the first instance, a considerable time having elapsed before she had assistance.

CASE IV.—Mrs. H.—Arm presentation a *third time*. Thus, in three successive labours this unfortunate woman had an arm-presentation; in each the child was still-born, and probably might have been saved if she had timely assistance given her.

CASE V.—Mrs. K., a labourer's wife, eighth labour; ill ten hours; left arm presenting, and protruded nearly as far as the shoulder; abdomen tympanitic; pulse small and rapid; patient complains of unremitting pain; expulsive efforts frequent, unavailing, and exhausting. In order to soothe and sustain the patient, allay fruitless uterine efforts, and so avert impending evil, thirty drops of the acetum opii were at once given; and as this dose was insufficient, twenty drops were shortly afterwards administered, when the child was turned without any difficulty, and subsequently expelled by the natural efforts; the placenta followed in a short time. The uterus contracted well, yet the patient seemed to be scarcely relieved from her sufferings, and continued to complain, for at least an hour after delivery, of severe pain just below the epigastrium; after this period it was less complained of, but pain at the occiput became troublesome. After the lapse of a few hours the patient slept a little, and was quieter, but during sleep had involuntary tremors of the left arm and leg, which would cease upon sprinkling the face with cold water, and applying a stimulus to the nostrils. The bowels were duly acted upon by aperients, but the weak and exhausted condition of the poor woman completely forbade the employment of more active treatment. She lingered for two days in this state, made little complaint, and suddenly expired on the third day, after having discharged a large quantity of blood from her stomach, in the act of vomiting.

No post-mortem examination could be obtained.

CASE VI.—A. M., a labourer's wife, in labour for several hours, arm presenting, and the shoulder wedged in the brim

of the pelvis, the waters having been drained off for some time. An opiate having been given, the child was turned, and delivered with much difficulty. The placenta was duly expelled; slight inflammatory symptoms followed, but yielded to a mild antiphlogistic treatment.

CASE VII.—A poor woman who had been in labour for a considerable time (exact period not known) sought for medical aid when nearly in a state of complete exhaustion. The arm presented externally, and was much swollen; however, turning was effected without delay or trouble; yet symptoms of low inflammation speedily followed, and the poor sufferer sank exhausted in a few days.

CASE VIII.—Mrs. F., aged 49; tenth child, the youngest aged five years. During these five years she has suffered much from chronic rheumatism, which completely deprived her of the use of her limbs, so that during pregnancy she moved about by the aid of crutches. Labour had commenced some hours before visit; the os uteri is now fully dilated; cord prolapsed and pulseless; shoulder presenting. A full opiate having been given, the child was in due course turned, and easily delivered.

This lady made a good recovery; remounted her crutches in good health and spirits, and, for aught I know, may have again increased the number of her offspring.

#### REMARKS UPON THE PRECEDING CASES.

In cases of arm presentation assistance must be given early and judiciously, in order to secure the life of the infant, and to rescue the parent from all the dangerous consequences of impracticable labour, when unduly protracted. I mean impracticable through the mere natural efforts, since I have never witnessed an instance of "spontaneous evolution," in which the position of the child became altered without any artificial aid, so as to be subsequently expelled by the unassisted uterine efforts. In Case I. the necessary aid was not procured until the labour was so long protracted as to induce fatal exhaustion, and thus predispose the patient for the fatal uterine inflammation, which, if it did not precede, immediately followed upon delivery.

The second case affords a remarkable instance of an arm-presentation occurring in three successive confinements. Now, if allowed to speculate, or to indulge in hypothesis, in such matters, may we not suppose that this woman, in consequence of having her mind unduly occupied with the thoughts of her misfortune in having a cross-birth, and losing her child, was

thus, through the operation of a strong mental impression, rendered more likely again to become the subject of this departure from the ordinary course of nature?

Be this as it may, we see that where preternatural labour once occurs, it is likely to happen again, and I doubt not it might be proved from a registry of such cases, that preternatural labour has occurred—in the majority of instances—more than once in the same individual. The usual practice of giving a full opiate was followed here, and although profound sleep and stertorous breathing were induced, yet most powerful uterine action was aroused upon the introduction of the hand, the uterine contractions continuing, during the efforts made to turn the child. What advantage, then, in giving opium to arrest uterine contraction, if this contraction can be excited in a powerful degree, even whilst the patient is evidently narcotised? Although I would not rashly proceed to turn during active uterine contractions, without having previously endeavoured to allay uterine action by the use of opium, or of other appropriate means, as bleeding, or the use of tartar emetic; yet experience proves, that whilst the nervous system generally is brought under the influence of opium, the organic contractility of the uterus (in many cases) will be found in active operation. There can be no doubt as to the tranquillizing influence of opium upon the cerebro-spinal nerves generally. And in this way the opiate will obviously, though in an indirect way, facilitate the operation of turning. But, from the fact here stated, it would seem that the uterine nerves, which are not altogether supplied from this source, but also from the sympathetic nerves, are not equally under the sedative influence of opium. Hence the patient may be narcotised, and yet, the organic sensibility of the uterus remaining, it may be excited to make continued and powerful expulsive efforts, by the powerful stimulus of the hand introduced within its cavity.

We know that in cases of profound apoplexy the heart will continue to act for a considerable time, and that the functions of other vital organs will continue for some time unimpaired also, under such circumstances,—a fact explained by considering the source from whence these organs receive their nerves. Whilst some authors recommend opium as a remedy in uterine hemorrhage occurring during child-birth, Dr. Beatty states that opium will cause flooding if given at this period, by preventing efficient uterine contraction. All accoucheurs agree in opinion, that this drug may be used with great benefit during the progress of, and subsequent to, the

completion of labour. Since, then, opium is an agent mighty to do good or evil, it is most important that we should have established data to guide us in the use of this medicine during the progress and after the completion of labour.

During the progress of labour opium may be advantageously employed to soothe the system, allay morbid irritability, suspend weak, inefficient, and harassing pains, which tend merely to weary the sufferer and induce exhaustion, being clearly indicated by their inefficiency in advancing labour, and their efficiency in producing restlessness and exhaustion. A few minutes' sleep, even artificially induced under such circumstances, may serve to bring a lingering and hazardous labour to a speedy and favourable termination.

Violent retching, colicky pains of the bowels, or similar accidental symptoms which tend to interfere with the natural progress of labour, may also find in opium an appropriate remedy.

Uterine hemorrhage occurring during the progress of labour can seldom, if ever, be appropriately treated by opium alone. Extreme exhaustion, induced by flooding, at any period of labour, may call for the free use of this medicine; but it is to be ever borne in mind, that here we use this medicine as a remedy for exhaustion, not as a remedy against hemorrhage; not to prevent loss of blood by flooding, but to avert the imminent danger consequent upon excessive loss of blood.

Hemorrhage coming after the birth of the child, before the complete separation and expulsion of the placenta, or after its removal, and whilst the uterus is yet enlarged and imperfectly contracted, requires great skill and promptness of action to arrest it successfully. I do not think that opium may be safely relied on in such cases. Efficient uterine contraction is the only remedy upon which we may rely for safety, and we dare not trust to opium to effect this. It has been stated that post-partum hemorrhage is often induced and kept up by morbid irritability and inefficient contraction of the uterus, evils to be remedied by the anodyne effects of opium. This state of things is indicated by frequent returns of very distressing pains, faintishness, and the discharge of clots and fluid blood. I have fairly tested the use of opium here; it failed in its anticipated results so entirely, that I could not feel justified in again pursuing a similar plan of treatment. Doubtless, flooding of a very formidable character does now and again occur, apparently as the result of undue irritability, and consequent irregular and inefficient action of the uterus.

But bearing in mind the axiom, that efficient uterine contraction is the remedy for undue uterine hemorrhage occurring after delivery, I prefer the following plan of treatment: the keeping up well-directed steady pressure with the hand over the uterus from above downwards, in the direction of the cavity of the pelvis, if need be, for hours; free exposure to cold air; the application of cold water in the usual way, aided by the infusion of ergot of rye in some cases, and, if these fail, the introduction of the hand, and emptying the uterus of clots, may be indispensable.

From these brief remarks it would appear that opium is useful, first, at the commencement, and during the progress of labour; secondly, after the birth of the child; and thirdly, after the expulsion of the placenta. It is a fit and useful agent in quieting what are named "spurious or false pains," often affording prompt relief of unavailing suffering, and promoting directly the favourable progress of labour.

In the excessive exhaustion which invariably follows upon immoderate loss of blood, it acts most favourably, by quieting restlessness and anxiety, and inducing sleep, so necessary to the preservation of life under these circumstances.

From the fifth case we learn the very important lesson, that the effects of labour upon the general system, rather than its particular stage or duration, should guide us in the all-important decision as to when we are to use active interference. Here we find a labour of only ten hours' continuance, accompanied by alarming symptoms, which distinctly forebode the approaching fatal result. We further learn that the progress and termination of every case of labour will be much influenced by the state of the patient's health previous to her confinement. Doubtless, this poor woman was in ill health previous to the occurrence of labour. I have ever found the "epigastric pain," so distressing in this instance, to be a formidable symptom, and have known it to precede fatal convulsions; in this case it would appear to have indicated hyperemia of the mucous membrane of the stomach. The transference of pain to the occiput, probably the result of congestion at the base of the brain, was an unusual occurrence, indicating the strong tendency which exists during the puerperal state to the formation of local congestions, often fatal in their issue. The condition of this patient from the first visit was such as to contra-indicate any very active interference after delivery had been completed; due attention was paid to the state of the bowels, and an endeavour made to support the strength by appropriate treatment.

The very favourable termination of the eighth case was more than could have been anticipated, in considering the crippled and helpless condition of the patient. However, the capacity of the pelvis having remained undiminished, the rheumatic affection of the joints opposed no hindrance to the progress of labour, nor in anywise interfered with the favourable progress of her confinement.

As I have had much more ample experience in the use of opium as an anæsthetic agent in the practice of midwifery, than of chloroform—its rival in the field of obstetric science—I shall not venture to trespass upon the readers' patience further than to state that I believe the latter to be an agent of vast importance in the treatment of such cases as I have just alluded to, and perhaps under certain circumstances to be preferred; but that I am not yet so fully convinced of its superior efficacy as to make it a substitute for, or prefer its aid to, that of opium in practice generally.

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ART. XIV.—*Lithotomy Simplified*. By JOSIAH SMYLY, A.B., Surgeon to the Meath Hospital.

I HAVE been so pleased with the result of the operation for removing the stone from the bladder, advocated by Mr. Allarton, that I have been induced to publish the following case as a proof of the simplicity and safety of it.

I would recommend the "median incision" in many cases to which lithotomy (by the lateral incision) or lithotrity are now considered peculiarly suited. Children have been cut for stones so small that the minute foreign body has been swept out with the first gush of urine, and escaped unnoticed; it is unnecessary to say with what facility such stones could be expelled through an opening in the membranous portion of the urethra; but should the surgeon, previously to operating, be unable to measure the size of the stone, and upon opening the urethra find it too large for expulsion, he will, owing to the dilatability of the neck of the bladder, have no difficulty in introducing a lithotrite and breaking the stone in fragments.

Lithotrity, so suited to the adult, is not even in the most healthy person, and under favourable circumstances, free from danger. Fragments of the broken stone occasionally become impacted in the bladder or in the urethra, and excite inflammation in these structures, or, by penetrating them, may give rise to extravasation of urine; and not unfrequently, after the