Observations

ON THE

CÆSAREAN SECTION AND ON OTHER OBSTETRIC OPERATIONS.

BY

THOMAS RADFORD, M.D.,

F.R.C.P. EDIN. AND F.R.C.S. ENG., ETC.,

HONORARY CONSULTING PHYSICIAN TO ST. MARY'S HOSPITAL,
MANCHESTER.

INTRODUCTORY REMARKS.

THE Cæsarean section is not an operation of recent date; its performance is recorded before obstetric medicine and surgery were scientifically accepted (vide *Edinburgh Medical and Surgical Journal*, vol. xxv), and has since been generally recognised in most of the modern systems of obstetrics. Although this is the fact, yet it has not received the unanimous approval of the members of our profession. From a very early date it has had its advocates and its opponents. To my knowledge, there has been no subject connected with medicine which has created more bitterness of feeling and animosity in the minds of those who may be classed as Cæsareanists and anti-Cæsareanists.

In no city or town in these empires have these repugnant and unprofessional feelings existed to a greater extent than in Manchester. The important but rancorous controversy which took place here between Dr. Hull and Mr. Simmons brought the greater part of the medical profession to entertain more clear and definite opinions. The writings of Dr. Hull, apart from their controversial character, contain most valuable and practical observations.

When I received the honour of appointment to deliver the first obstetric address before the Provincial (now named British) Medical Association, at the next meeting which was to take place at Manchester, I selected a practical and at that time a debateable subject; and, even at the present time, the opinions of medical men are unsettled and discordant upon it. My opinions upon some parts of the subject, no doubt, differed from the great majority of those who honoured me by patiently listening to its delivery; yet I did not hesitate freely, and I hope conscientiously, to express them. At the present time, I do not shrink from the responsibility of again bringing more fully before the entire profession my views, which had only been partially known for several years before the delivery of the address. I have the fullest confidence that the doctrines promulgated will receive the unprejudiced judgment of the profession.

I was induced to select for my subject the Cæsarean section, and those other means which have been recommended to supersede its performance, partly because these subjects have been, as already stated, warmly discussed in this city; and partly because the greatest number of cases (I speak relatively) in which the Cæsarean operation has been performed in Great Britain and Ireland, have occurred in this city and in the neighbouring districts. The analytical

tables contain a report of seventy-seven cases. Of this number, fifty-five have happened in England; of which, twenty-five have occurred in Lancashire; fifteen cases have occurred in Scotland; and seven cases have taken place in Ireland. It is a remarkable fact, that there stands no case recorded from Wales.

The following observations are entirely confined to British and Irish cases. I have purposely avoided admitting foreign cases into the tables, or of making remarks upon, or of drawing any deductions from them; although I am quite aware the maternal mortality might be shown to be considerably less by their admission for computation, than it appears by only taking the results of British and Irish practice.

In the following pages, all the questions have been faithfully and conscientiously discussed; and all the opinions which are given are, as far as possible, based on facts. My object is to endeavour to place the Cæsarean section, and some other obstetric operations, on such medical, social, and moral grounds, as to be approved by both the profession and society at large. The doctrines which I have inculcated in the following pages are only desired to be received in the spirit in which they have been written; and I desire them to be taken in no other way than as they are worthy of acceptance or rejection.

The tables which were brought before the Association contained records of many points which have been now omitted in order to reduce them. They contained an account of the number of previous labours, and the mode of delivery; the state, etc., of the os uteri; the location of the placenta, etc.; the exact line of the incision; and some general remarks on the condition of the patient before, during, and after the operation, etc. I have, however, embodied the deductions to be drawn from the record on most of the subjects above adverted to.

CHAPTER I.

On the Necessity of the Cæsarean Section as an Obstetric Operation.

IN an ill directed controversial ardour, Mr. Simmons, in his remarks addressed to Dr. Hull, declared that the Cæsarean section was universally and inevitably fatal, and proposed a compound operation of symphyseotomy and craniotomy to supersede it. It was not long afterwards before he had an opportunity of putting in practice his highly lauded operation. He was consulted in the notable case of Elizabeth Thompson, whose pelvis (now in my possession) is extremely distorted. An examination of it must have brought conviction to his mind that some other means must be adopted in order to deliver her. It is to be presumed he renounced his proposed operation, as he discarded his patient, who was afterwards brought to the Manchester Lying-in Hospital, and delivered by the Cæsarean section.

Dr. Hull, at this time, endeavoured to settle the disputed question of the necessity of this operation; and the soundness and justice of his opinions were generally approved of by the profession. If this question had still remained undisturbed, it would have been unnecessary for me to interfere with this part of the subject. Within a few years, however, not only the necessity, but likewise the propriety, of its performance has been denied, and opprobrious

epithets employed (unworthy of the talented physician who used them), which, although totally unfounded, not only cast odium on the operation, but also reflect most unjustly on the character of those obstetricians who have conscientiously recommended it and boldly performed it. More recently, it has been declared by an obstetric physician, that the induction of abortion, the induction of premature labour, craniotomy, or these two last operations combined and applied according to the degree of distortion, would render the Cæsarean section altogether unnecessary.

The Cæsarean section is doubtless required whenever the pelvic apertures, or its cavity, are so diminished that a mutilated infant cannot possibly be drawn through. This diminution may be positively produced when the pelvic bones are distorted by mollities ossium, by rickets, or by irregular union of, or by a large deposition of callus on, these bones after fractures; or from exostosis, which may grow upon any portion of the bones.

The pelvis is also sometimes relatively so diminished by different kinds of large tumours which are lodged within the pelvis; some of which are loose, whilst others are immovably fixed so as to render this operation necessary.

An analytical statement of the causes which have rendered the performance of the Cæsarean section necessary in these kingdoms, will be found numerically to stand as follows. Of the seventy-seven tabulated cases, forty-three were produced by mollities ossium, of which thirty-two were English, ten Scotch, and one Irish. In fourteen cases, the pelvis was distorted from rickets, of which twelve were English and two Scotch.

In one case, the distortion was congenital (English), and was of a rickety character; in two cases, one English and one Scotch, the pelvis had been fractured.

In six cases, fibrous or other tumours existed in the pelvis; of which three were English, two Scotch, and one Irish. In two cases, there was an exostosis growing from the base of the sacrum; of which one was English and one Irish. In two English cases, carcinoma of the os and cervix uteri caused the obstruction. In seven cases, the cause is not recorded.

Nearly all the pathological causes enumerated above which render the Cæsarean section necessary are progressive; and most of them may proceed to such an extent as nearly to obliterate the apertures of the pelvis, or to block up the cavity.

I have in my possession, a distorted pelvis in which the brim is nearly destroyed, there not being a greater space between the descending lumbar vertebrae and the pubes on each side than the tenth part of an inch. The space between the lumbar vertebrae and the rami of the pubes is five-sixteenths of an inch, and the space between the jutting of the pubes near the symphysis is three-eighths of an inch.

So, likewise, exostosis, or tumours within the cavity, have grown so large as to prevent a finger from passing without great difficulty. These pelvic conditions may exist in a first pregnancy, or may come on at any time during the child-bearing period; and a woman who has had several natural and propitious labours may, in successive cases, have greater or less impediments existing, which may require different means for her delivery; or the pelvis may be naturally capacious in one labour, and in her next the

bones may be so distorted, or its cavities may be so filled, as to require the Cæsarean section.

Then, with such uncertainties as these, it is obvious that both the patient and practitioner may be completely ignorant of these organic conditions until pregnancy has either been considerably advanced, or even completed, and labour commenced.

Surely, the most benighted opponent to the Cæsarean section cannot be so mentally blind as not to know that young married women can not be compelled to submit to vaginal or other examinations in order that it may be ascertained whether there is sufficient pelvic capacity for a full-grown infant to pass through. But, supposing the practitioner to be acquainted with the state of the pelvis, the means recommended to supersede the performance of the Cæsarean section are quite inadequate to prevent its necessity in those higher states of distortion, etc., which have existed in most, if not all, of the cases which are tabulated. Ample testimony exists of the truth of the above remark in some of the cases contained in the tables.

Dr. Hull relates several cases, and within my own knowledge others have occurred, in which it was quite impossible to deliver the women after either embryotomy or craniotomy had been performed. Then, under these circumstances, what measures must be adopted for the delivery of the woman? Must she die undelivered with a mangled infant still in the womb? This event has been most unwarrantably allowed to happen. Again, ought the Cæsarean section to be performed to extract a mutilated infant? This practice has been pursued. These are weighty reasons why the Cæsarean operation should be considered as one, at least, of necessity. There are, however, other grounds to be spoken of, which further establish this proposition. No doubt every obstetrician will admit that it is absolutely necessary for the os uteri to be accessible when he intends to induce abortion: more especially, if this operation is to be performed by the aid of instruments. And when, at later periods of pregnancy, craniotomy is contemplated, it would doubtless be considered a *sine qua non* that both the os uteri, the degree of its dilatation, and also that the presentation of the infant, should be ascertained before this destructive operation is performed. These important desiderata do not, however, always exist in cases in which the pelvis are highly distorted.

In twenty-one of the tabulated cases, the os uteri could not be felt; in twenty-one cases there is no account given, from which it is fair to conclude that it could not be touched—making together forty-two cases. In thirty-five cases, the os uteri was discovered with more or less difficulty. In sixteen cases, no part of the infant could be reached. In forty-one cases, we have no account; which omission affords negative or presumptive evidence that the presentation could not be ascertained, which together make fifty-seven cases. In twenty-one cases, the following presentations are recorded: in twelve the head, in three the hand, in two a hand and a foot, in one a foot, in one a hip, and in two the arms.

The foregoing remarks, and the above authenticated facts, are, I hope, amply sufficient to establish the proposition of the necessity of the Cæsarean section as a recognised obstetric operation. Although the subsequent observations do not relate to the necessity of the operation, yet I deem them so practi-

cally important that I have ventured to place them in this chapter.

In some cases of rupture of the uterus, the infant might be removed with more safety to the mother by an abdominal section, than by dragging it away either by the feet or by the crotchet. Trask's extensive statistics are very favourable to its adoption in some cases of this accident.

When a woman who is nearly at the full period of pregnancy dies, or if killed by accident, the obstetrician is, morally, socially, and professionally, bound to propose *post mortem* hysterotomy. Justice to the incarcerated (most likely living) infant demands an immediate decision, as too long delay would be hazardous to its life. It is, however, a well known fact, that the infant survives the death of its mother much longer than is usually supposed. In this empire, medical men are quite at liberty to exercise a free and conscientious judgment; they are not trammelled by theological dogmas, as they are in France and other countries.

CHAPTER II.

On the Statistics of the Cæsarean Section.

THE statistics of the results of the Cæsarean section, especially as concerns the mothers, are highly unfavourable. The general account stands as follows of the seventy-seven women whose cases are tabulated. Sixty-six, or 85.71 per cent., died; eleven, or 14.28 per cent., were saved.

The number of successful cases here mentioned is greater than is usually allowed to have taken place; and, therefore, this statement requires further explanation. They are registered as follows. Nos. 1, 12, 35, 36, 37, 49, 53, 57, 67, 68, and 71; of these, Nos. 1, 12, 36, 49, 53, 67, 68, and 71, perfectly and permanently recovered. Case No. 35—She also recovered; the wounds being nearly healed. She lived several weeks; but afterwards she died from epilepsy, to which malady she had been previously subject. Case No. 37—The woman recovered; and afterwards died from disease of the hip-joint.

There is, however, another case included in the deaths which ought, in my opinion, to be in some measure considered as one of recovery. She lived seven days; and so long as she was rationally treated, she went on favourably. But after the treatment had been injudiciously changed, she gradually grew worse and died.

The special statistics, or the results, of the cases in which I have been concerned are as follows. Of six women, four died, or 66.66 per cent.; and two were saved, or 33.33 per cent.

From the seventy-seven women, seventy-eight infants were extracted; one being a case of twins. Of which forty-six, or 58.97 per cent., were saved; and thirty-two, or 41.02 per cent., were dead. Nearly all these infants were dead before the operation, which might have been saved if it had been earlier performed.

The special statistics, or the number of deaths, in my practice stand thus. Of six infants extracted, three, or 50 per cent., were saved; and three, or 50 per cent., were dead. Two of this number were dead before the operation, one of which was putrid; the death of the other was doubtless chargeable to the operation, and was caused by a spasmodic seizure of its neck by the uterus during its extraction.

The risk to infants in Cæsarean births is not much greater than that which is contingent on natural labours, provided correct principles of practice are adopted.

If I dare venture to give an ideal comparative estimate, I should say, if it is supposed 1 per cent. be the mortality of natural labour, that consequent on the Cæsarean section may be stated as scarcely $1\frac{1}{2}$ per cent.

Original Communications.

REMARKS ON CERTAIN POINTS IN THE SURGERY OF CELSUS.

By H. LOWNDES, Esq., Liverpool.

[Read before the Liverpool Medical Society, Nov. 17, 1864.]

WHEN we look back over a space of eighteen hundred years to the Augustan era, we feel like a man who stands on a mountain-top, and who, looking over a vast valley full of little hills, sees afar off the top of another great mountain, and wonders whether it can be as high as that on which he stands.

We, "the heirs of all the ages in the foremost files of time", are apt to look with contempt on those who have preceded us in what we call the race; and yet, with all our vast material progress, we have much that may teach us not to be too proud-minded. May we not already be descending from our highest point towards a new series of dark ages, a new deep and long valley, bounded by some mighty mountain far off in futurity? To pursue the simile, in the art of poetry, we seem to have culminated in the two peaks of Shakespeare and of Milton, and can hardly hope to reach such heights again. In the art of painting, we can hardly hope again to see the days of Raphael and of Michael Angelo. In eloquence, that trio, Lord Chatham, Fox, and Burke, are unapproached in these latter times. Has our art of Medicine reached its culminating point too? Is Surgery declining since the days of Hunter, and Medicine since those of Sydenham? The reply is satisfactory; here we are indeed "the heirs of ages in the foremost files of time"; and although I fear our medical writers can make no pretensions to the chaste and classic style of Celsus, yet we may maintain that the height on which we stand is higher than that Augustan mountain separated from us by so many ages, and that we have not yet reached our greatest height. A well educated surgeon of the present day will have more resources than were possessed by John Hunter; and the physician of the present day, though he may not rival Sydenham in his elegant Latin—which, however, some say was not his own—will be, if not so brilliant, yet surely a less sanguinary practitioner.

After this prelude, which I hope will be excused, I shall proceed to show, from a few examples, how high the eminence on which surgery stood in the days of Celsus, and to compare its state, in some respects, with its present condition; while I may allude very briefly to that long and dreary interval to show how low the art has sometimes fallen.

Fractures. Celsus, in his general rules for the treatment of fractures, points out the necessity of bringing the broken ends into apposition at as early a period as possible by making proper extension and manipulation; but says that if this extension is not used at first, it must not be used at all until the swelling and inflammation have subsided. He directs