

THE AMERICAN
JOURNAL OF OBSTETRICS
AND
DISEASES OF WOMEN AND CHILDREN.

VOL. XVIII.] MARCH, 1885. [No. 3.

ORIGINAL COMMUNICATIONS.

A PLEA FOR EPISIOTOMY.¹

BY

W. P. MANTON, M.D. (Harvard),
Detroit, Mich.

IN looking over the literature of the expulsive stage of labor, one is rather surprised to find the scanty reference made to what should be considered one of the most important of surgical procedures for the prevention of perineal rupture, namely episiotomy, or the lateral incision of the perineum.

Enough is said *pro* and *con.* the use of perineal support to enable one to form an opinion as to the value of such assistance; the inunction of fats and oils—of most doubtful service—in cases of rigid perineum, is fully explained; and the proper use of the forceps is clearly demonstrated. Yet of the surgical enlargement of the orificium vulvæ we find only a hint, or at most the method is discussed in a few inadequate lines.² Thus one author says:

¹ Since this article was begun, a paper from the pen of Prof. Credé, of Leipsic, on the same subject has appeared in the *Archiv für Gynäkologie*, Bd. 24, p. 150. In the revision of my own article I have availed myself of this paper and Prof. Credé's experience.

² Lusk: "The Science and Art of Midwifery," London, 1884, p. 210, gives the fullest account of this operation of any author I have consulted.

"But there are cases in which rigidity is the cause of rupture; and when the latter is impending, we may occasionally be justified in making a slight incision with a lancet, or tear with the finger-nail if possible, on each side of the ostium vaginæ."¹

Another writes:

"When the tension is so great that laceration seems inevitable, it is generally recommended that a slight incision should be made on each side of the central raphé, with the view of preventing spontaneous laceration. This may no doubt be done with perfect safety, but I question if it is likely to be of use. The idea is that an incised wound is likely to heal more readily than a lacerated one. When, however, a distended perineum ruptures, its structures are so thinned that the tear is always linear; and, as a matter of fact, the edges of the tear are always as clean, and as closely in apposition, as if the cut had been made with a knife. Moreover, the laceration invariably heals perfectly if only the edges be brought into contact at once with one or two metallic sutures."²

When the former author says "there are cases in which rigidity is the cause of rupture," he tells but half the story, and leads the reader to believe that rigidity alone, if anything, calls for the use of the knife. This certainly is a mistake which I shall endeavor to explain further on.

But when so distinguished an accoucheur as Dr. Playfair says of episiotomy that he "questions if it be likely to be of use," we must believe that the operation has not been done sufficiently often in the lying-in wards of King's College Hospital to prove its efficacy. One hesitates to criticise the opinions of men who are known to the world as Nestors in their individual specialties, and yet investigation often tends to overthrow such opinions, and place in their stead facts, which in their turn must also pass through the fire.

"If a laceration is inevitable," says Matthews Duncan, "treatment to prevent it can be of no avail."³

How then, we ask, are we to know if a laceration is inevitable? Arguing from the above the only answer can be, "wait and see; if it tears, it tears; otherwise no harm is done."

¹ Leishman: "System of Midwifery," 1879, p. 271.

² Playfair: "The Science and Practice of Midwifery," vol. I., London, 1882, p. 339.

³ "Papers on the Female Perineum," London, 1879, p. 16.

But Dr. Duncan is more progressive than the last writer quoted; he does not stop with the inevitable, but goes on to say that, "all the lacerations of the orifice of the vagina are not inevitable; and that one which is so may be treated with a view to prevent its extension beyond the inevitable degree."

I am of the opinion that the statements that a perineal tear is "always linear," and "that it invariably heals perfectly," even when the edges are brought into contact at once with one or two metallic sutures, are fallacious.

In answer to the first let us turn to the obstetrician of St. Bartholomew's, than whom no one has done more to give us a clear understanding of the functions of the perineum. Speaking of certain cases, he says :

"The injuries are called lacerations and tears, because these words express their mode of production. Most were like clean cuts, some more or less *ragged* on the edges. Others might be called deep *abrasions* and have been designated as ulcers."¹

The majority of perineal tears *are* linear but are not *always* such; a number which I have seen have been "ragged." As to "invariably healing," even when sutured, Dr. Thomas says :

"There are three circumstances which tend to defeat the success of immediate operation. First, it is often performed by one not habituated to its performance; and, being practised upon a woman who, having just been delivered, is exposed to the danger of post-partum hemorrhage, and surrounded by anxious friends, it is likely to be finished too hastily.

"Second, the lochial discharge, constantly passing over the lips of the wound, is very likely to enter and prevent union.

"Third, the operator, having been taught to regard the perineum as the superficial layer of tissues intervening between the fourchette and anus, closes this by correspondingly superficial sutures, leaves the upper portion of the perineal body open, creates a pouch for the accumulation of putrefying materials, and leaves the anterior vaginal wall and bladder without support in the future."²

Winckel says :

"If the perineum was healthy before the rupture, and the

¹ L. c., p. 23, the *italics* are mine.

² "Diseases of Women," 5th edition, 1880, p. 189.

operation carefully done, about 65 per cent heal entirely by first intention."¹

But a large number of perineæ which rupture *are not* healthy before the tear takes place; this being a frequent cause of the lesion. Hence, a much smaller percentage of cures than Winckel gives must be taken as nearer correct.

Ahlfeld, writing of this laceration in elderly primiparæ, says that:

"The wounded surfaces often have in such cases a mangled appearance. To this circumstance it is due that healing in the entity by first intention seldom takes place."²

Of eighty perineal ruptures reported by Schroeder:

"Twenty-seven healed completely, seventeen were united, but granulated along the wound where the skin gaped a little in places, or where a small granulating spot was found above on the frenulum; fifteen were healed at the bottom in the vicinity of the lowest sutures, while the upper part gaped; and in fifteen no union whatever took place. In six the result was not noted. 59.46 per cent are therefore to be regarded as completely healed; 20.27 per cent as incompletely, and 20.27 per cent as not at all."³

In a number of cases which have come to my notice, the patients have absolutely refused to have the parts "sewed up," immediately after labor, and have been obliged either to submit to a later operation, or endure, perhaps, the discomforts which so often supervene on lacerations of this part.

The secondary or remote sufferings to which the subject of a lacerated perineum is liable—the reflex nervous, as well as from anatomical changes and displacements—are too well known to need mentioning here. It will, however, be of interest, as bearing upon the value of episiotomy, to glance for a moment at that class of cases which is pre-eminently predisposed to this misfortune, and afterwards at the percentage of lacerations which take place respectively in primiparæ and multiparæ.

"It would appear," writes Duncan, "that in the Darwinian progress of the species the head of the fetus has increased in

¹ "Die Pathologie und Therapie des Wochenbettes," 3d edition, 1878, p. 61.

² Arch. für Gynækologie, Bd. iv., p. 510.

³ "Schwangerschaft, Geburt, und Wochenbett," 1867, p. 164.

size more rapidly than the orifices and passages through which it has to come, have increased in size and dilatability."¹

Whether or no we accept this theory of a symmetrical development of the two parts, the fact remains that in a pretty large number of cases there is an absolute disproportion between the periphery of the fetal head and the soft parts of the mother.

"If we acknowledge this," says Olshausen,² "then we can with propriety assume that in a like proportion of births episiotomy may be of service."

Disregarding deformities of the pelvis and the fetus, which are not infrequent causes of perineal rupture, we have remaining causes due to the patient herself, abnormal conditions of the vulva and perineum, and manual and instrumental delivery of the child. The patient herself may produce a laceration by too violent bearing down or straining, especially when the uterine contractions are abnormally strong or "stormy."

Position during delivery no doubt also plays an active part in producing this lesion.³ The soft parts may have undergone some previous operation; or disease, such as syphilitic or scrofulous ulceration, may have rendered the perineum dense, hard, and cicatricial in character.

Acute and chronic edema of the parts, as in delayed second stage, in nephritis, and sometimes in twin pregnancies and hydramnios, leave the tissues in a soft, doughy, and non-resisting condition. B. Schultze further gives as a cause the abnormal rigidity of the ligamentum triangularis, which Winckel thinks is probably very often confounded with contracted pubes, a condition rarely seen, except in osteomalacia.

I have found two classes of women particularly liable to rupture. In the first we find dark skin, and well developed muscles, covered by a dense layer of adipose tissue. Here the perineum is usually thick, stiff, and unyielding. The second class of patients are women almost the opposite of the first, having a loose, flabby, soft muscular development. Here the perineum may distend like India-rubber, but is liable to tear

¹ L. c., p. 7.

² Volkmann's "Klinische Vorträge," No. 44.

³ See Aveling, "Position in Gynec and Obstetric Practice," 1878, p. 128. also Hecker, Archiv für Gynäkologie, Bd. xii., p. 97.

without the slightest warning. I have heard old midwives designate such as a "butter" perineum.

Incidentally, other conditions of the tissue may lead to rupture.

Of instrumental, etc., interference, nothing need be said, as rupture from this cause very often depends upon the skill and experience of the practitioner.

Statistics as to the frequency of perineal laceration may be of little value *per se*, yet they direct our attention to the very common occurrence of this lesion, and lead us to inquire if there be not some remedy or prophylactic for so great an evil.

It would be very interesting could these figures be drawn from the private practice of our leading obstetricians; but there always seems to be so great a reluctance on the part of most physicians to discuss perineal ruptures which have occurred in their own patients, that it would be next to impossible to bring together such a collection.

The results appearing in the following tables have been taken from various German authorities, and, although few in number, will give an idea, at least, of the frequency of perineal ruptures in the great lying-in hospitals of that country.

I.—General Percentage of Perineal Ruptures.

Montford ¹	1,105 cases	22. per cent
Winckel ²	No. of cases not given.	20. "
Hildebrandt ³	" " " " "	7.2 "
Hecker ⁴	" " " " "	3.66 "
Preiter ⁵	7,190 cases	3.47 "
Spiegelberg ⁶	3,000 "	3.5 "

II.—Percentage of Ruptures Occurring in Primiparæ.

Preiter ⁵	In 250 cases of rupture.	88.4 per cent.
Winckel ²	" 120 " " "	82.60 "
Schroeder ⁷	No. of cases not given.	84.5 "
Olshausen ⁸	" " " " "	21.1 "

¹ Quoted by Winckel, l. c., p. 60.

² L. c., p. 60.

³ "Krankheiten d. äusseren weiblichen Genitalien," 1877, p. 71.

⁴ Arch. für Gynäkologie, Bd. vii., p. 448.

⁵ Winckel, l. c., p. 60.

⁶ "Lehrbuch der Geburtshülfe," 1882, p. 572.

⁷ "Lehrbuch der Geburtshülfe," 1880, p. 679.

⁸ "Ueber Dammschutz und Dammverletzung," *Klinische Vorträge*, No. 444.

III.—Percentage of Ruptures Occurring in Multiparæ.

Winckel ¹	In 120 cases of rupture.	16.66 + per cent.
Preiter ²	" 250 " " "	11.6 " "
Litzmann	" 496 " " "	11.49+ " "
Schroeder ³	No. of cases not given.	9. " "
Olshausen ³	" " " " "	4.7 " "

Some interesting figures have been published in regard to the occurrence of rupture in elderly primiparæ.

IV.—Percentage of Ruptures in Elderly Primiparæ.

Grenser ⁴	In 43 cases.....	47.61 per cent.
Ahlfeld ⁵	" 102 "	30. " "
Hecker ⁶	" 422 "	14. " "
Cohnstein ⁷	" 394 "	3.56 " "

In the face of these figures, which at least express the relative frequency of perineal rupture, it would appear that something ought to be done to bring about a diminution in the number of cases. In episiotomy, I claim, we have an efficient and—compared with spontaneous rupture—a safe and sure means.

In saying this I do not advocate a new and untried procedure, but one which has stood the test of years.

This operation was first suggested by Michaelis during or about the year 1799.⁸

It consists in making an incision with a probe-pointed bistoury, or scissors, on one or both sides of the frenulum, about two to three cm. above its middle. The knife—which I prefer to the scissors, although the latter are used in many of the Continental schools—is laid flat against the fetal head, and slid between it and the tense ring at the vulvo-vaginal orifice. If the knife is now turned on its back, so that the cutting edge

¹ L. c., p. 58.

² Winckel, p. 58.

³ L. c.

⁴ "Ueber Geburt bei älteren Erstgebärenden in der Privatpraxis." Reprint 1882. These cases from private practice should hardly be placed by the side of the others, which are from hospital records.

⁵ Arch. für Gynäkologie, Bd. iv., p. 510.

⁶ The same, Bd. vii., p. 448.

⁷ The same, Bd. iv., p. 499.

⁸ According to Prof. Parvin—"American Gynecological Society's Transactions," Vol. 7, 1882—Ould advocated the operation as early as 1742.

comes to the constricting ring, and is gently raised in the direction of the ischial tuberosity, an incision will be made, the length of which can be regulated by the operator.

As a rule, from one to three cm. is all that is necessary; and it is just as well not to include the external skin in the incision, although no harm is done should this take place. The operation should be performed on the opposite side if required; but very often unilateral incision is sufficient. The incision should be made just at the close of a pain, while the tissues are still tense, but the acme of the uterine contraction has passed.

There is little or no pain produced by the cutting; indeed, I have done it several times without the patient's knowledge.

Care must of course be exercised not to include a fold of the fetal scalp, or a bunch of hair between the edge of the knife and the frenulum. If the operation has been quickly and skilfully done, the head may be delivered during the pause succeeding the incision; but it should not be allowed to escape during a contraction, lest the incision be torn down, or a posterior rupture also take place.

Rarely these both will occur in spite of our best efforts.

The after-treatment consists either in uniting the incisions by one or two sutures—a performance which I confess I have never found necessary—or in cleansing the wound with a bit of antiseptic cotton, and then dusting the surfaces liberally with iodoform.

The cuts heal perfectly in the course of a week.

As to the altered appearance of the vagina which some claim, it must be remembered that an incision which appears long in the distended tissues may seem only a crack when those tissues have contracted. If left to heal by granulation, the incisions appear later as mere nicks which can hardly be said to deserve the name of deformity.

Even this may be avoided by uniting the edges of the wound by sutures, the result being a fine cicatrix, which appears quite yielding at subsequent labors.

The indication for episiotomy as given in the books is a *threatening* laceration. This prescribes its usefulness too closely.

There are very many instances where there is no apparent dan-

ger of rupture, but, on account of the smallness of the maternal parts, it is impossible for the head to get through. Here incision, instead of the forceps (in certain instances both), is certainly indicated. Credé also mentions that it should be thought of in prolonged and painful labors, to shorten the sufferings of the mother.

The objections to this operation seem to consist:

1st. In the fear that some anatomical element of the vulva, as the vulvo-vaginal gland duct, etc., may be injured; that the cut surfaces may be a point of departure for infection, etc.; and that the incisions do not really prevent rupture.

2d. That, if advocated, it will be unnecessarily often performed.

I have myself performed and witnessed the performance of episiotomy a large number of times, and up to the present have seen none of the evil effects which some attribute to it. I have never seen the deformity, painful cicatrices, etc., which Parvin says Tarnier has observed, and am inclined to believe that they are rare occurrences. That the wounds might prove points for the entrance of septic material cannot be denied; but in those cases which I have noted this has not taken place, and the slight rise of temperature which has occasionally been found can just as well be attributed to fecal accumulation, or to injuries higher up in the parturient canal, as to the lateral incisions.

In 2,000 cases examined by Credé, there were records of 33 deaths. Autopsy showed 19 of these to be due to septic infection; the other 14 cases were caused by eclampsia, uterine rupture, and intercurrent diseases. Of the 19 septic cases, 15 were found in 1,572 cases where the perineum was *intact*—a percentage of 0.954; while only 4 died who had perineal laceration—a percentage of 0.934, a scarcely appreciable difference. This would seem to indicate that the chances for infection are about equal, whether episiotomy is done or not.

It cannot be said that lateral incision saves the perineum in *all* cases, but of 957 primiparæ¹ of which I have notes, I find but *two*² cases of posterior laceration recorded as occurring *after* episiotomy. The perineal wounds were as follows:

¹ Vienna Clinic.

² These were both forceps cases.

IV.—Primiparæ (957).

Lateral incisions.....	38	0.396 per cent.
Spontaneous ruptures.....	22	0.229 “
Ruptures in spite of incision.....	2	0.208 “

Mundé¹ reports 448 cases where episiotomy was done nine times. He is, however, “confident that this operation was performed forty or fifty times, but was considered too unimportant to require notice except in special cases.” Four ruptures of the perineum took place in spite of the incisions; a percentage so high, if the operation was done only nine times, that we are forced to believe the cases must have been very exceptional ones; or else the number of operations really done must have far exceeded the number noted.

Prof. Credé gives the following analysis:

V.—Primiparæ (1,000).

Lateral incisions....	259	25.9 per cent.
Spontaneous ruptures.....	104	10.4 “
Ruptures in spite of incision... ..	29	2.9 “
	<hr/>	<hr/>
Perineal injuries.....	392	39.2 per cent.

VI.—Multiparæ (1,000).

Lateral incisions.....	12	1.2 per cent.
Spontaneous rupture.....	14	2.4 “
	<hr/>	<hr/>
Perineal injuries.....	36	3.6 per cent.

From the above we see that with 259 incisions only 29, or 2.9 per cent, tore after episiotomy had been performed, thus saving 230 perineæ from posterior laceration—a result which certainly speaks well for the operation.

Credé further found that lacerations diminished in proportion to the frequency with which lateral incisions were made. Thus, of five assistants, the one who resorted to the operation oftenest had the fewest ruptures:

Incisions in Iparæ.	Ruptures in Iparæ.
10.3 per cent.	20.7 per cent.
20.4 “	11.8 “
26.3 “	11.0 “
28 “	7.4 “
32 “	7.2 “

Of all these cases not one of total rupture is recorded.

¹ This JOURNAL, vol. viii., p. 535.

Whether or no the advocacy of this operation will lead to its abuse remains to be seen.

In the foregoing pages I have attempted to show :

1st. That the percentage of perineal ruptures is very large.

2d. That certain conditions of the maternal soft parts, etc., predispose to rupture.

3d. That episiotomy diminishes the frequency of these ruptures to a minimum, and thereby rescues a corresponding number of women from a greater or lesser amount of suffering.

4th. That only in very exceptional cases does rupture take place after episiotomy.

5th. That the danger of infection is no greater where episiotomy is done than where it is not.

If the above statements are correct, there is no excuse for the accoucheur who allows a perineum to rupture without having first done episiotomy for its possible prevention.

£0 Farrar Street