## EPISIOTOMY.

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THE purpose of this paper is to renew attention to a little-used procedure of definite value in certain obstetric cases. Episiotomy was first suggested by Ould¹ in 1742, and again by Michaelis² in 1810, but received little attention until about 1885, when the operation was taken up by Credé³ Manton,⁴ and others.

It was at first used to substitute a clean incised wound for the lacerations of the perineum. But as improvement in the after-care made union after a primary perineorrhaphy possible, the operation fell into disuse. Episiotomy today has one indication, namely, the prevention of complete tears of the perineum.

While with improved obstetric technic complete lacerations of the perineum are less common than formerly, there are still occasional cases in which these are unavoidable except by the increase of room afforded by section of the soft parts in a lateral direction. According to Williams<sup>5</sup> a large part of all complete tears are the result of contractions of the inferior strait of the pelvis. To this must be added the rigid perineum of the late primigravida, the short perineum where the distance from the fourchette to the anus is very short, unusual size of the fetal head, the aftercoming head in breech presentations and face presentations delivered as such (Edgar<sup>6</sup>).

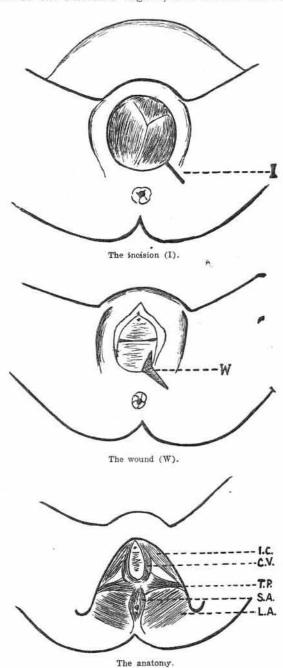
It is desirable for good approximation that the incision should be made before the perineum starts to tear. Practically it will be often necessary to make use of this procedure after laceration has commenced. In this event the incision should be made from the edge of the tear rather than from the original margin of the vulva.

## ANATOMY.

The soft parts of the vaginal outlet may be divided into two parts:

- The levator ani.
- The small perineal muscles and the fibrous tissue and fasciae making up the perineal body.

The levator ani, or rather that part of it which Savage<sup>7</sup> has named the pubo-coccygeus, arises from the posterior surface of the os pubis and extends backward about the vagina on either side to be inserted into the tip of the coccyx and the fibrous body of the perineum. This muscle can be palpated about one inch inside the introitus vaginæ, and should not be



I.C. ischio cavernosus. C.V. constrictor vaginae. T.P. transversus perinei.

S.A. sphincter ani. L.A. levator ani.

cut in performing episiotomy. Schuchardt's incision, which is sometimes made as a preliminary to vaginal hysterectomy to allow a wider access to the vagina, does divide this muscle.

The perineum proper consists of two small muscles, the sphincter vaginæ and transversus perinei, which, with some fibres from the levators, blend in a mass of fibrous tissue known as the perineal body, which is connected with the lower borders of the rami of the pubis and ischium by several indistinct fascial planes, analogous to the superficial perineal fascia and triangular ligament in the male. The incision should divide these parts.

#### TECHNIC.

The incision should be made at an angle of about 45° with the median line of the perineum, and not at a right angle, in order to avoid wounding the venous plexus of the labium and to give the greatest room for extension. It is most easily performed with sharp, long-bladed, blunt-pointed scissors.

Jewett<sup>8</sup> does the operation bilaterally. Usually, however, it will be necessary to incise only one side. Waldstein<sup>9</sup> makes a median incision half way through the perineal body, and then extends the incision at right angles on either side. The repair after such an incision is, however, extremely complicated.

The suture of the episiotomy incision is rather difficult, and involves suture of the vaginal and perioneal aspects of the incision with interrupted sutures of catgut and silkworm gut respectively. Placing the stitch first, which embraces the junction of the skin and vaginal mucous membrane, greatly facilitates accurate approximation.

The after care is the same as that of primary perineorrhaphy. A slight experience with the operation will convince one of the advantage of performing episiotomy over allowing the perineum to tear into the rectum. The writer has done episiotomy in a number of cases from which he has selected two as illustrative of the whole group.

Case 1. Mrs. L., a muscular primipara of 25, after a tedious labor of 20 hours was delivered by forceps. The perineum was extremely rigid and undilatable. Realizing that a tear through the sphincter would otherwise be' inevitable, the soft parts were divided to the left for a distance of one inch. Delivery of a living 7 lb. baby was completed without further damage to the soft parts. The episiotomy wound was sutured and united by first intention. Four years later the patient was delivered normally of a 7½ lb. baby. Episiotomy was not performed because the labor had proceeded so rapidly that there was not time to fully anesthetize the patient, and a tear into the sphincter resulted, which fortunately, however, united by first intention.

Case 2. Mrs. S., a large, well-formed primigravida of 24, was delivered by low forceps after a sixteen-hour labor. In spite of the greatest care the perineum started to tear, and realizing that extension through the sphincter was inevitable, the

soft parts were divided to the left of the perineum. Delivery of an 11½ lb. baby was then accomplished without injury to the sphincter. Healing of the episiotomy incision was complicated by suppuration, resulting in partial breaking down of the wound. This, however, gave no loss of support, and the breaking down of a complete perineal suture, which would have happened just as surely, would have meant a period of fecal incontinence, followed by the discomforts and difficulties of a secondary operation. Sixteen months later she was delivered normally of a baby 2½ lbs. smaller than the first, without further laceration.

#### CONCLUSIONS.

- Episiotomy is a procedure of definite value.
- Properly used, it should practically eliminate complete lacerations of the perineum from gynecology.
- 3. It should not be performed except to prevent a complete tear, because incomplete perineal tears heal as well as the episiotomy wound and are less difficult to suture.
- Complete lacerations of the perineum are especially to be feared in:
  - (a) Contractions of the inferior strait.
  - (b) Rigid perineum, as in late primigravidae.
  - (c) Short perineum.
  - (d) Unusual size of fetal head.
  - (e) Aftercoming head in breech presentation.
  - (f) Face presentations.

# REFERENCES.

¹ Ould: Treatise on Midwifery, 1742.
² Michaelis: Quoted by Parvin, Trans. Amer. Gyn. Soc., 1882, vii, 145.
² Oredé: Archiv. f. Gyn., 1883, xxiv, 150.
⁴ Manton: Am. Jour. Obst., 1885, xviii, 225.
⁵ Williams: Surgery, Gyn., Obst., 1909, viii, 619.
⁶ Edgar: Practice of Obstetrics, 1907, p. 909.
† Savage: On the Female Pelvic Organs, London, 1882, pp. 3, 5.
³ Jewett: Practice of Obstetrics, 1899, p. 242.
² Waldstein: Samml. klin. Vortr. Gynäk., Nr. 235.