Episiotomy

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Introduction

The debate on the uses and abuses of episiotomy has been largely brought to the public eye by organisations such as the National Childbirth Trust, who believe that episiotomy among other techniques in frequent use in obstetric practice is employed too frequently and without sufficient reasoning. Up until recent years such cries got little attention let alone support from the majority of obstetricians. More recently a proportion of medical opinion has lent support to these claims on the basis that there is a staggering lack of evidence for some of the claimed indications and advantages of episiotomy, Barker¹. Others point out that there is equally no evidence that the alternatives are any better, Flood². Kitzinger³ claims that the evidence for the liberal use of routine episiotomy is unconvincing. In the same article she also claims that episiotomy is the only surgery to be performed, without consent, on the body of a healthy female and that it (episiotomy) is an example of an intervention which has been introduced into obstetric practice without accurate assessment and without asking women what they prefer. Russell⁴ perhaps makes one of the more important contributions when she states that it would be a pity if clinical practice were changed on insufficient evidence because of a patient led protest and that the answers should come from clinical research.

History

Most authors agree that episiotomy was first described by Sir Fielding Ould in his "Treatise of Midwifery" in 1742 when he was Master of the Rotunda Hospital in Dublin, Beynon, Lieberman, Spencer^{5,6,7}. Since then it has been described by many authors describing various techniques and varying indications. Arguments about the pros and cons of the midline and the mediolateral raged in the past and continue today, but these will be discussed later.

The operation of episiotomy has become increas-

ingly common. 21 per cent of primigravida who had hospital confinements in 1958 had an episiotomy compared with a 91 per cent incidence among primigravida in Leeds Maternity Hospital in 1978, Buchan and Nicholls⁸. Kitzinger³ claims an increase to a general figure of "well over 50 per cent" in 1979 from a 22 per cent incidence in 1968 in England and Wales. She points out that a dramatic increase took place when hospital based delivery gradually replaced home confinements; an argument supported by Fox⁹. The presumed cause of the increase was that the immediate access to a doctor service by the midwife, in the delivery suite, made episiotomies less time consuming than in district because the doctor was on hand for suturing and that the doctor made the decision to do an episiotomy more readily than the midwife. Moore¹⁰ suggests that the increase in use may be due to increased intervention with a view to reducing time spent in the second stage, the rising proportion of forceps deliveries, the frequency with which junior doctors and pupil midwives now carry out deliveries and the overall increase in delivery by doctors instead of midwives.

In the United States episiotomies were performed in 69 per cent of vaginal deliveries at the University of Washington in 1976, Shy and Eschenbach¹¹. It would appear that the United Kingdom is approaching these American figures although it is doubtful if we would approach the aims of some North American Obstetricians in advocating universal episiotomy for vaginal deliveries, Moore¹⁰.

Methods of Episiotomy

(a) *Medio-lateral Episiotomy*: This is the method favoured in the United Kingdom. The incision commences in the midline posteriorly and extends through the posterior fourchette, perineal skin and superficial perineal muscles for approximately 2 cms. It is extended laterally on one or other side (usually the right) of the anus for a further 3 to

5 cm, Lieberman⁶. The incision is usually made with sharp scissors.

Following delivery the incision is sutured by first securing the apex and using a continuous suture for the vaginal epithelium. Interrupted sutures are used in the deeper layers and the perineal skin closed. The method of suturing the vaginal skin varies from surgeon to surgeon. Of prime importance is anatomical realignment usually based on the level of the hymenal remnants.

Proponents of this method regard the 8 per cent incidence of third degree tears associated with midline incisions, Beynon⁵ as too high. It is however accepted that more pain, dyspareunia and poor anatomical results occur compared to the midline. It is also said to result in more blood loss and is more difficult to repair, Lieberman⁶.

(b) *Midline Episiotomy*: This is the method most favoured in the United States. The posterior fourchette, perineal skin, superficial perineal muscles, and vaginal epithelium are incised with a scalpel, Lieberman⁶. Beynon⁵ recommended that the incision be made with a pair of sharp scissors. Lieberman⁶ comments that a scalpel gives more precise control and avoids inadvertent damage to the rectum. This is a sentiment also felt by Flood² who feels that any type of episiotomy should be performed with a scalpel as a sound surgical principle.

Suturing commences again by securing the vaginal apex and using a continuous suture to the introitus. Using interrupted sutures for the deeper tissues and a subcuticular suture for the skin from posterior to anterior completes the repair.

Beynon⁵ cites the following practical advantages of the midline incision:—

- 1 The patient is more comfortable in the early days of the puerperium.
- 2 Bleeding from the incision is less.
- 3 The wound is more easily repaired.
- 4 Healing tends to be better.
- 5 With no loss of elasticity of either side of the fourchette, the risk of dyspareunia should be reduced and with no muscle fibre damage the full function of both halves of the puborectalis should be preserved.

Repair, Results and Complications

No matter which method of episiotomy is used post-operative perineal discomfort will vary from individual to individual and will depend on a number of factors such as the type of incision employed, method repair, experience of surgeon and materials used for repair. Coats et al¹² performed a random-

ised prospective study of 407 primigravida and compared the consequences of midline and mediolateral episiotomies. They found that patients' estimates of the pain from their episiotomies were similar and that anal sphincter injury was significantly more common after a midline procedure.

They also found that although the amount of pain experienced on resuming intercourse was similar, those who had had a midline episiotomy began intercourse significantly earlier. The cosmetic appearance of the scar was significantly better in the midline and the scar had a softer texture.

Most authors stress the importance of local analgesia when making an episiotomy, Hoults¹³ and House¹⁴ believes "it is quite barbarous to do an episiotomy without a local anaesthetic." It is important to remember that should any delay ensue between birth and the repair then further local anaesthetic will be required.

Controversy arises over the timing of an incision. Kitzinger³ suggests that many are performed too early in the second stage by midwives to encourage a vaginal delivery without instrumental interference by a doctor. House¹⁴ comments that it is impossible to know that an episiotomy will be required unless the perineum is distended, that blood loss will be more significant the earlier an episiotomy is done and that cutting a thick perineum with scissors often results in a ragged wound. Flood² suggests that an early episiotomy is indicated to protect the integrity of the pelvic floor and that the thick perineum would be much more usefully incised with a scalpel.

It is essential that the repair of an episiotomy is undertaken by an experienced surgeon. Many authorities suggest that the repair should be undertaken by the person who made the incision.

This inevitably means that midwives should be thoroughly trained and encouraged to repair them. Unfortunately, in many areas there is considerable resistance to this among the senior midwifery staff. There is no place for inexperienced junior doctors, pupil and qualified midwives, and medical students suturing episiotomies without adequate supervision by a Registrar.

Some measure of prevention of dyspareunia may be obtained by exact anatomical apposition, and rounding off the fourchette to prevent a sharp skin fold. This is easily done by taking the suture from the skin edge to deeper tissues on each side thereby rounding off the fourchette.

Llewellyn-Jones¹⁵ writes that 65 per cent of women will have no discomfort 24 hours after the repair if a continuous stitch is used, 28 per cent will have slight discomfort and 7 per cent will complain of pain. This compares favourably with suturing in the routine manner.

Buchan and Nicholls⁸ compared post-episiotomy pain following two methods of repair of the perineum. They concluded that subcuticular "dexon" gave less discomfort on days 3, 4 and 5 than black silk mattress sutures but that dyspareunia was common and lasted longer in patients sutured with "dexon". Dyspareunia was also found to be more common in the older primigravida. The reduction in post-partum perineal pain and oedema was also observed by Livingstone et al¹⁶.

Other complications of episiotomy such as sepsis and breakdown vary with the experience of the surgeon. Re-suturing is ill advised if infection is present. A very rare complication of episiotomy is maternal death from necrotising fascitis or clostridial myonecrosis as reported by Shy and Eschenbach¹¹.

However, the debate is no longer about which episiotomy should be performed and how they should be sutured. Many surgeons now believe that the dangers of the midline incision have probably been overstated, House¹⁴.

The current controversy

Controversy is now about the number of episiotomies performed and the reasons for performing them. This means a reappraisal of the indications for performing episiotomies and whether or not current and generally accepted practice should be altered.

The arguments revolve around the use of the elective episiotomy on the premise that an episiotomy protects the mother's perineum and facilitates delivery of the baby by shortening the second stage. It is believed that a short second stage is better for the baby because the period of anoxia is shortened. Haire¹⁷ reports that shortening the second stage of labour by performing episiotomy in the absence of fetal distress has not been shown to be beneficial to the infant. The use of an episiotomy to facilitate instrumental delivery, breech delivery, premature delivery or in fetal distress are not included in the argument. It is noteworthy that Moore¹⁰ reports that the use of vacuum extractor rather than forceps may reduce the incidence of episiotomy.

House¹⁴ suggests that as the operation itself cuts across natural skin folds and across muscles, that these factors alone are in fact related to poor healing. He further claims that episiotomy does not prevent tears and that it may in fact result in an increased number of tears. House¹⁴ also claims that there is no evidence that episiotomy prevents prolapse and this is an argument supported by Haire¹⁷. House¹⁴ maintains that a well repaired second degree tear bleeds less, heals better and is less painful than a mediolateral episiotomy, Barker¹ but no work has yet been published to substantiate this.

Flood² in reply to these arguments reminds us that there are equally no figures to denigrate the practice of episiotomies. Neither can any figures be produced "to substantiate the claim that a ragged perineal tear caused by the expulsion of a blunt fetal head through an over-distended perineum heals better than a clean surgical cut." Flood² also suggests that the main reason for elective episiotomy is prevention of prolapse in later life and although he recognises the fact that a long term follow-up will be required to prove this, he does point to the fact that prolapse is very uncommon in America where there is a high incidence of elective episiotomy for a lift out forceps rather than letting the patient "thrash on for hour after hour until the fetal head has battered its way through the perineum," as often takes place in Britain as midwives try to attain that goal of "the intact perineum". Flood² also suggests that episiotomies should be performed sooner rather than later because once the perineum has been thoroughly distended an episiotomy performed then is far too late to have any effect upon the integrity of the perineal muscles.

Conclusions

If there are any conclusions to be drawn from this report the most important is that much research is going to be required to substantiate any of the aforementioned claims either for or against. One such trial comparing pain and healing after an episiotomy and a tear is at present being run at the Royal Berkshire Hospital, Reading, but no results are yet available. Reading et al¹⁸ have also studied post episiotomy pain and subsequent recovery.

Of the principles that most authors agree on suturing of an episiotomy by an experienced surgeon under adequate analgesia is probably most important in the prevention of subsequent problems. Added to this, a careful explanation of the particular reason for performing an episiotomy, where the cut takes place and the problems of discomfort that the patient may experience, and a reassurance that most people do not suffer more than inconvenience may go a long way to reducing the number of complaints to lay organisations.

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Reports of Meetings

Association of Service Physicians (Germany)

The fourth annual meeting of the Association of Service Physicians (Germany) took place at BMH Rinteln on 11 October 1983.

The morning session comprised an impressive demonstration of amphibious engineering operations on the River Weser at Hameln by 28 Amphibious Engineer Regiment, kindly arranged by the Commanding Officer Lt Colonel J J Thompson MBE. Several attending physicians subsequently tried their hand at operating the equipment, and were made acutely aware of the very considerable skill of the junior NCOs who normally use it.

The afternoon session, held in the Postgraduate Medical Centre, BMH Rinteln, was attended by 18 members and guests, under the chairmanship of Brigadier D M Roberts.

Professor N H Wadia, Professor of Neurology at Grant Medical College, Bombay University, gave a most erudite and fascinating presentation on "Neurology in India". After discussing briefly the problems of neurotuberculosis, leprosy and other infections, he went on to a more detailed account of the epidemics of Enterovirus 70 disease which in recent years have swept across Africa, India and the Far East to Japan, manifest as an acute haemorrhagic conjunctivitis often followed 3 weeks later by a polio-like illness. He then described the neurological problems resulting from congenital abnormality of the atlanto-axial joint which is not uncommon in Indians, discussed hot-water epilepsy, and mentioned briefly oligo-ponto-cerebellar degeneration with slow saccade, juvenile motor neuron disease, and the aortic arch syndrome. He concluded by remarking on the rarity of multiple sclerosis and subarachnoid haemorrhage in India.

Professor Dr Med G W Sybrecht, Professor of Respiratory Medicine, University Hochschule, Hannover and Hon. Civilian Consultant Physician to the Army in BAOR, gave a very clear resumé of respiratory physiology, and the importance of objective measurements in distinguishing obstructive from restrictive patterns of disease. The value of flow-volume loops in the diagnosis of large airway obstruction was described, together with nitrogen washout techniques for detecting abnormalities of gas mixing within the lungs.

Colonel G Ward, Consultant Physician 7th Medical Command United States Army, discussed "Current and Future Aspects of Clinical Immunology". This included a detailed account of the Acquired Immune Deficiency Syndrome (AIDS), and a very thorough account of the actions of steroid therapy.

Finally, Lt Col T B N Oldrey gave an illustrated talk entitled "The Falklands—One Year On"—an account of the current situation on the Islands and his recent experiences as Consultant Physician at the British Military Hospital, Falkland Islands.

(Submitted by Lt Col T B N Oldrey)