MEDICAL PRACTICE

Clinical Topics

How women view postepisiotomy pain

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Abstract

Episiotomy is one of the most commonly performed operative procedures and yet little information is available on the subjective reactions in the puerperium to this procedure. The present study was designed to furnish information on the attitudes of patients, levels of pain, and of course recovery by studying a consecutive series of 101 Caucasian primiparea who received episiotomies at delivery. Women were interviewed within 24 hours of delivery and then, at three months after delivery, completed a questionnaire. The high level of pain experienced was noteworthy. Labour pain and episiotomy pain were uncorrelated, indicating the importance of distinguishing between them. Several women were experiencing problems at the three-month follow-up, with some attributing these to the episiotomy repair. The data are presented in the framework of providing women in the postpartum period with systematic information on the nature of postepisiotomy pain and subsequent recovery to facilitate their adjustment.

Introduction

Considerable research has been done on maternal attitudes[1] and behaviour[2] towards the neonate, as well as maternal mood changes,[3] during the postpartum period. Less attention has been given to the subject of pain and discomfort resulting from episiotomy during the puerperium. Research has focused on pain associated with labour and delivery and how to control it, with less emphasis on pain arising from the episiotomy. The importance of this discrepancy in knowledge is indicated by the frequency with which episiotomies are carried out, as it is currently one of the most common operative procedures. For example, among primigravidaes having their first confinements in 1958, the incidence of episiotomy was 21% compared with 91% in 1978.[4] A leading article in the *BMJ*[5] identified concern by stating, "The perineum after childbirth may be the source of much discomfort and pain. This may be so whether it is overstretched, torn, or incised as in episiotomy. Symptoms may persist for many days after delivery, and a badly performed repair may cause dyspareunia." In the present study we attempt to document the nature of postepisiotomy pain and its severity, incidence, and modulating factors. A second objective was to study the process of recovery, to identify factors associated with healing, and to reassess the attitudes of patients towards the care received. The study was essentially descriptive, with no effort made to intervene or alter the care being received in any way.

Method

We studied a consecutive series of Caucasian primiparous women who had received a mediolateral episiotomy and given birth to a normal, healthy infant at the obstetric unit at King's College Hospital. None of the women approached refused to participate. All were interviewed within 24 hours of delivery by a research psychologist or research nurse. They were asked to report their level of present pain and the pain experienced during labour on both visual analogue and verbal rating scales, to indicate how the labour pain compared with expectations, and to rate satisfaction with various aspects of the medical and nursing care. Women rated events in the antenatal period in terms of whether the pregnancy had been planned, intention to breastfeed, and amount and source of information about episiotomy. Postpartum mood was rated on Cantrill ladder scales, and obstetric details were transcribed from the case notes.

Three months later a questionnaire was sent inquiring about their

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recovery. Women were asked to rate their retrospective recall of labour and episiotomy pain while in the hospital and to indicate subsequent problems and pain levels. The latter were subdivided into specific activities, and they were required to indicate whether they attributed difficulties to the episiotomy. Sexual functioning was assessed, with once again a distinction drawn between change and difficulties attributed to the episiotomy.

Results

A total of 101 women were studied (mean age 24·1; SD = 4·6; range 17-39). Of these, 18 were single, with a mean gestational age of 39·1 weeks (SD = 1·8; range 30-42). Fifteen were in social class I, 26 in II, 48 in III, 10 in IV, and 2 in V. Most labours were of spontaneous onset (n = 95) and accelerated (n = 95). Modes of delivery were: normal vaginal (58), forceps (32), vertex (7), breech (3), and ventouse (1). Almost all women required analgesia during labour: 48 received an epidural, 37 pethidine, and 11 nitrous oxide (Entonox); only five received none. After delivery 27 required no analgesia, 59 admitted to taking paracetamol, 14 distalgesics, and one intramuscular papaveretum (Omnopon). Data from attitudinal questions towards the pregnancy and the delivery showed that 77 of the pregnancies were planned and 73 of the women attended antenatal classes, 37 of whom were accompanied by their husbands. A range of wellbeing during the pregnancy was reported with only 10 declaring particular health problems (table I). Fifty-eight reported themselves to be aware of the episiotomy, and only 12 were unaware of this possibility at the time of the delivery. A range of attitudes was evident in terms of estimates of the adequacy of advance preparation for the episiotomy and preparation at the time the cut was made, although most expressed satisfaction with the way in which the stitching was performed (table II). Tables III and IV show pain ratings using the verbal rating and visual analogue scales. Forty-five thought that the pain during labour had exceeded their expectations (table V). Ratings of labour pain on both visual analogue and verbal rating scales showed high levels, with a range of response for their current experience of episiotomy pain.

Follow-up data were available for 69 patients—that is, a response rate of 68%. Of these, 23 stated that they had a problem with the episiotomy repair, with 22 having to seek professional help. The nature of the problem was reported to be pain (10) infection or delayed healing (9), and problems with the wound (3). Table VI gives responses to specific questions as to the pain experienced walking, sitting, urinating, and defecating, along with whether or not this discomfort was attributed to the episiotomy. Most did not experience pain on urination, with roughly half reporting pain on sitting or defecating. Few attributed the pain urinating to the episiotomy, although almost all attributed the sitting pain to the episiotomy and a lower proportion the pain associated with defecation. Episiotomy-related pain was being experienced by 10 (14%) at three months. Fourteen had resumed sexual intercourse within one month, 35 in two, seven in three, and two had not yet done so. Sixty complained of dyspareunia, of whom 88% attributed this discomfort directly to the episiotomy. Table VII shows the effects of the episiotomy in terms of quality ratings of sexual enjoyment and libido. Many attributed reduction in sexuality to the episiotomy.

Associations between variables were examined. Planning the pregnancy was significantly associated with attendance at antenatal preparatory classes ($\chi^2 = 8·8$; df = 2; $p < 0·01$). This attendance also related to the use of analgesia after delivery, with those attending requiring significantly less analgesia ($\chi^2 = 12·8$; df = 6; $p < 0·001$). Episiotomy pain was associated with the method of delivery. According to the verbal rating scale the more complex deliveries were associated with higher pain levels ($\chi^2 = 15·3$; df = 8; $p < 0·05$). Forceps were significantly associated with postdelivery analgesia ($\chi^2 = 17·3$; df = 5; $p < 0·05$), with the latter related to retrospective reports of episiotomy pain during the puerperium ($\chi^2 = 20·4$; df = 12; $p < 0·05$) and of the cut ($\chi^2 = 14·7$; df = 9; $p < 0·09$).

Pearson Product Moment correlations between ratings were computed. Present pain rating of episiotomy on both scales correlated negatively with mood ($r = -0·44^{**}$ and $-0·28^{**}$ respectively), positively with duration of first stage ($r = 0·16^{*}$), and with ratings of "being a person who shows pain" ($r = 0·18^{*}$). None of the ratings of labour pain correlated significantly with the ratings of episiotomy pain.

TABLE I—*Degrees of wellbeing experienced by 101 patients during pregnancy*

Very poor	Poor	No change	Good	Very Good
1	15	31	16	38

TABLE II—*Range of attitudes of 101 patients towards adequacy of preparation for episiotomy and subsequent satisfaction with aftercare*

	Very dissatisfied	Dissatisfied	Uncertain	Satisfied	Very satisfied
Adequacy of preparation for episiotomy	10	9	1	28	53
Adequacy of preparation at the time	4	19	21	19	38
Satisfaction with aftercare (suturing)	2	4	16	24	55

TABLE III—*Pain ratings on rating scales after delivery and at follow-up*

Pain	Distribution of pain ratings				
	Mild	Discomforting	Distressing	Horrible	Excruciating
At delivery					
Labour pain	2	21	37	16	24
Episiotomy pain	19	63	10	7	
At follow-up					
Labour pain	3	33	5		
Episiotomy pain	5	43	11	7	3
Episiotomy cut	35	13	17	10	6

TABLE IV—*Pain ratings on visual analogue ratings*

	Mean	SD	Range
Episiotomy pain	22·2	22·9	0-100
Labour pain	72·6	24·5	0-100

TABLE V—*Comparison of labour pain with expectations*

Much less	Less	Same	More	Much more
10	20	25	20	25

Discussion

This survey of a consecutive series of primiparae undergoing episiotomy at delivery has provided systematic data on the subjective reaction to episiotomy during the puerperium. All women reported some degree of discomfort after the episiotomy, with many declaring the pain to be severe. Interestingly, reports of episiotomy pain were uncorrelated with those of labour pain, emphasising the need to distinguish between these two experiences of pain in studies conducted in this setting. Unfortunately, it was not possible to compare subsequent reports of women receiving an episiotomy with those sustaining tears and those retaining an intact perineum. The high incidence of episiotomy makes such a comparison unfeasible.

The objectives of this study have been twofold. Firstly, it was to establish a baseline against which procedures aimed at facilitating recovery may be compared. Previous surveys have paid insufficient attention to psychological factors, which influence the perception and expression of pain. In the present study, in addition to collecting multidimensional data on pain and modulating factors, women were asked to indicate both the nature and

TABLE VI—*Reports of pain at follow-up*

Activity	Pain present		Attributed to episiotomy	Pain rating				
	Yes	No		Mild	Discomforting	Distressing	Horrible	Excruciating
Walking	15	44	13	5	10			
Sitting	26	33	24	7	17	1	1	
Micturition	10	49	10	6	3	1		
Defecation	25	34	16	8	11	4	2	

TABLE VII—*Changes in sexual functioning*

	Change		Attributed to episiotomy	Much decreased	Decreased	Same	Increased	Much increased
	Yes	No						
Desire	24	33	11	5	14	5		
Enjoyment	20	37	12	4	13	3		
Quality	15	41	8	1	2	11	1	

degree of problems, as well as whether they attributed these to the episiotomy. Secondly, the information elicited may be used to prepare women for problems they may encounter. This objective emerged from a pilot study, in which a range of attitudes towards the episiotomy were expressed with some women declaring themselves to be ignorant of the reasons for the procedure or what to expect.[6]

The frequency with which episiotomy is carried out testifies to the importance of these findings. Alberman[7] suggested that the use of epidural anaesthesia may in part account for this increase, and indicated that the proportion of women receiving episiotomy had increased from 22·3% in 1968 to 36·9% in 1973 for England and Wales. It has not been our intention to enter the debate as to the indications for performing episiotomy but rather to focus on obtaining information on the postpartum adjustment and recovery. The postpartum assessment indicated the high level of pain experienced. Attempts to relieve pain will clearly be beneficial, and it is evident that analgesics are widely prescribed.[8] This practice, however, raises the question of the impact on the neonate of analgesics taken at this time in terms of the concentration of drug expressed through the breast milk. Pain may also contribute to disturbance of the postpartum mood, as dysphoria amplifies pain sensations. The pain may also affect attitudes and behaviour towards the neonate. Once again, the effect is potentially bidirectional, with the pleasure of the baby dampening the pain sensations or the pain detracting from the experience of motherhood both possibilities.

Previous studies have examined obstetric correlates of pain. Increased pain has been associated with forceps delivery, twins and breech deliveries, an extended second stage, large numbers of stitches, and a bruised and swollen perineum.[9] The present study confirms the association between reports of increased pain and complicated deliveries. The experience of labour or episiotomy was not found to be affected by attendance at antenatal classes, whether the husband also attended, or whether the woman intended to breast feed. The results suggest that most women hear about episiotomy, although many appear to remain unaware.

The follow-up rate for the postal questionnaire was thought to be a reasonable achievement for the catchment area studied, in view of the high geographic mobility, as after childbirth many patients became eligible for council rehousing. That 30% experienced problems requiring medical help documents the need for aftercare. The effects on sexual behaviour and feelings were of interest in view of the documented influence of psychological factors on sexuality. Coates *et al*[10] followed up women at three months and found that 45% complained of pain at coitus more than four weeks after resuming sexual activity and 15% more than eight weeks. Beischer[11] attempted to relate subjective symptoms to anatomical results of the repair. Of their sample, 23% complained of dyspareunia, with a low correlation between anatomical repair and subjective report emerging. Only half the patients had attempted intercourse by the sixth week postpartum, for fear this would disrupt the perineal wound, suggesting that the six-week postpartum assessment may not be adequate to assess the functional results of the episiotomy. In the present study a reduced pattern of sexual functioning was found, with between one-third and one-half of women reporting diminutions attributable to the episiotomy.

Preparatory counselling and information and appropriate data are evidently needed. Systematic information in the puerperium as to the nature of a satisfactory recovery would enable women to identify any deviations or problems from the expected course of events that would warrant the attention of their doctor, and they would experience less uncertainty and concern as a result. This might lead to more efficient use of the doctor's time and also help to prevent secondary sexual dysfunctions developing from delayed presentation of problems to the clinic. Studies have shown that preparatory counselling reduces the emotional impact of unpleasant sensations[12] and facilitates recovery after surgery.[13] Extensive use has been made of preparation for childbirth.[14] A similar preparation for problems postpartum might help in coping with the pain and discomfort resulting from the episiotomy. For example, Dennerstein *et al*[15] surveyed women undergoing hysterectomy and oophorectomy and found that many experienced dyspareunia due to lack of vaginal lubrication. The women were unaware that this problem should be brought to the attention of their doctor as treatment was available. In this case preparatory counselling of what to expect and the action to be taken may have been beneficial. There is a place for evaluations of preparatory counselling for coping with episiotomy.

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Epidemiology

Risks of zoonoses in a veterinary service

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Abstract

A survey was undertaken among the veterinary staff of the Ministry of Agriculture, Fisheries, and Food and the Institute for Research in Animal Diseases to estimate the distribution of occupationally acquired zoonoses in this population. A self-administered questionnaire was distributed to 1717 staff, 1625 (95%) of whom responded. It was observed that both laboratory and technical support staff were at risk from a variety of zoonotic infections, though generally to a lesser extent than veterinary surgeons. A history of injury while handling animals was reported frequently by veterinarians (45%). Accidental self-injection with vaccines was also commonly reported. It is suggested that both injury from animals and accidental self-injection are associated with the risk of zoonotic infection.

Introduction

Field and laboratory veterinary work has long been associated with a wide variety of hazards including glanders[1] and brucellosis.[2] It is only in the past few years, however, that attention has been directed to the wider occupational health problems of such workers.

During the past decade considerable attention has been paid to the occupational hazards of laboratory workers and particularly to their risk of contracting laboratory-acquired infection.[3-5] The veterinarian and the scientist in the Government Veterinary Service are both exposed to the hazards of zoonotic infection.

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The field staff of the Agricultural Development and Advisory Service, supported by veterinary and scientific staff of the Central Veterinary Laboratory and the veterinary investigation centres, play the principal part in controlling scheduled diseases among farm animals. These laboratories provide a diagnostic service as well as conducting research relevant to the ministry's animal disease control programme, while further basic research on animal disease is carried out by establishments in the Agricultural Research Council.

A survey of this group would have two objectives: firstly, to obtain an estimate of the prevalence of the zoonotic infections in this population and, secondly, to aid in planning the deployment of occupational health resources to the veterinary services.

Population and methods

Three main types of work are performed. Veterinary surgeons form one coherent group with a common exposure to animals and animal products in their profession and training. A second group consists of the supporting technical and experimental staff employed on experimental farms, and in veterinary investigation centres and other units. Members of this group also have close contacts with animals and animal products but probably less so than professional veterinarians. The third category consists of the various grades of scientific staff whose working environment is generally the laboratory.

Information was sought by questionnaire on any personal history of zoonotic infection, injury either by animals or in the laboratory, and accidental self-administration of drugs and vaccines intended for animal use. The study population consisted of Ministry of Agriculture, Fisheries, and Food veterinary and support staff in England, Wales, and Scotland, together with similar groups of staff from the Agricultural Research Council's Institute for Research in Animal Disease. The administrative roll was used to delineate the study population and exclude those staff absent on prolonged study leave or on lengthy overseas visits.

After a pilot study of the use of the questionnaire on a small sample of the study population, a total of 1717 questionnaires were distributed resulting in a 94·7% (1625) response rate, comprising 563 professional veterinary surgeons, 690 scientific staff, and 372 technical support staff. A follow-up study of 10% of the non-responders did not suggest that this was a major source of bias.

The information from the questionnaire was coded and recorded on punch cards for subsequent analysis by computer using the statistical package for social sciences.