

The New GP Contract

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In February, the new GP contract was announced by the government. GPs have had the same contract and been paid in the same way for the past 40 years. Their pay has been largely made up of capitation fees (a fee paid each year for each patient on a GP's list); item for service payments (a fee paid each time a certain activity is done, e.g. providing contraception advice); and target payments (a fee paid if a GP succeeds in immunising 90% of all children on the list or if 80% of eligible women have a smear).

Maternity fees are "item for service" payments. Around £150 - £170 is paid to the practice each time a mother who has signed the relevant form completes her antenatal and postnatal care, and an extra payment is made for intra-partum care. GPs receive these payments even if the care is given by a midwife.

Workload

The average GP workload has changed enormously in 40 years. GPs undertake many tasks which used to be done in hospital, e.g. running chronic disease clinics, such as care for people with asthma, and providing care for nursing home residents.

There are also many tasks which were commonplace 40 years ago which are rarely done now, such as intra-partum care. Change in the way GPs are paid was long overdue.

The new contract aims to reward high quality work rather than quantity of work. Workload has been divided roughly into these three groups:

1. Essential tasks which all GPs will undertake:
 - a) Treating those who are ill or believe themselves to be ill.
 - b) Treating those who are terminally ill.
 - c) In-practice management of chronic diseases such as diabetes.
2. Services which it is expected most practices will

provide, but which can be opted out of if the practice chooses.

3. Services which it is expected most practices won't provide, but can be opted into if the practice chooses. These services might be provided locally by a Primary Care Trust. (These may be known as Primary Care Organisations or PCO)

Practices will have to notify the PCO if they intend to opt out of group 2 and may have to "bid" to provide any services in group 3.

Antenatal and postnatal care will fall into group 2 and intra-partum care will fall into group 3. Providing care out of normal working hours will fall into group 2 and will no longer be the responsibility of the practice. This will be the first time ever that GPs have not had round-the-clock responsibility for their patients.

Finance

Practices will be rewarded financially for providing quality care and there will be defined quality targets and markers. There will therefore be a financial incentive to improve services to patients.

At the moment, the number of GPs in any area is decided by a central committee and the number of staff a practice has is governed by the Health Authority or Health Board. This will change and it will be up to each practice to decide how money will be spent on staffing.

The contract has been put on hold temporarily until a formula can be devised to take into account the different demographic features of practices. For example a practice in a deprived area should have taken into account the extra workload that deprivation causes when working out what the practice income should be. Although there are some details of the new contract which need further development, the basic structure of the new contract has appealed to GPs and it is likely to come into force within the next two years.

NCT EVIDENCE BASED BRIEFING Episiotomy and the Perineum

Introduction

This briefing provides a short history of the use of episiotomy in the United States (US) and the United Kingdom (UK), and the rationale for its introduction. It reviews the evidence for liberal and conservative use of the procedure, and summarises what is known about ways of preventing or reducing perineal trauma and subsequent negative effects. It does not include discussion of episiotomy for deliveries assisted with ventouse or forceps. A further evidence-based briefing on that subject will follow later in the year.

Background

Episiotomy is a surgical enlargement of the vaginal outlet made at the time of birth and is performed with a pair of scissors or a scalpel. It has become one of the most common surgical procedures in the world. It was introduced into practice in the eighteenth century by Ould in Dublin as an operation of last resort. During the 1800s and early 1900s the operation was seldom performed by American and British physicians and was reserved for rare situations where the then accepted non-surgical methods of preventing a severe tear seemed unlikely to be effective.¹

In the US, episiotomy was increasingly adopted as a routine procedure during the 1930s and 1940s. Between 1915 and 1925 a small number of leading obstetricians championed episiotomy as a prophylactic for (prevention of) maternal and infant morbidity and infant mortality. This was based on no more evidence than personal experience. Prophylactic episiotomy enthusiasts argued that childbirth was

a pathological process and routine intervention was needed to resolve its inherent problems. This attitude persisted within a "medical model" of childbirth, and spread to the UK along with routine use of other interventions (e.g. confinement in hospital and routine artificial rupture of the membranes and pharmacological pain relief) in the 1960s. The primary rationale for episiotomy was that women needed to be spared the trauma of physiological dilatation of the birth canal and crowning. The routine use of forceps was also considered an advance over natural birth.¹

In the UK, up until the mid 1960s, episiotomy was not used routinely; then its use spread rapidly, becoming expected practice in the care of first-time mothers in many units. In England and Wales the episiotomy rate escalated from 25% of all hospital deliveries in 1967 to 54% in 1978. Critics of the routine use of episiotomy included obstetricians, midwives, the NCT, Sheila Kitzinger, Luke Zander and the Association for the Improvement of Maternity Services. They mounted an effective challenge to the rationale for liberal use of the procedure. Women's experiences² and clinical evidence^{3,4} showed that episiotomy was itself a traumatic experience for many women, often causing long-term perineal pain, associated with physical, psychological and sexual dysfunction. Women's accounts included cases of episiotomy used brutally to interrupt the flow of a well-progressing labour.

In the seven years from 1978 to 1985, the English episiotomy rate declined dramatically from 53% to

37%, a relative reduction of 32%. By 1995/1996, the episiotomy rate for England and Wales had been further reduced to 27%; however, statistics showed considerable variation between units⁵. In the US there has also been a decline in the episiotomy rate; however, this was slower and later than the decline in the UK. In the US the rate slowly edged down from 65% to 50% in the period from 1979 to 1993, a relative decline of 23% over 14 years. By the year 2000, there had been a further reduction to 33%⁶.

An episiotomy is the equivalent of a second degree tear, where the skin and back of the vagina plus the muscles of the perineum are torn. A first degree tear involves the perineal skin and the back of the vagina, whilst a third degree tear involves the skin, back of the vagina, muscles of the perineum and extends partially or completely through the anal sphincter. A fourth degree tear is the same as a third degree tear, but extends into the rectum.

The two most common types of episiotomy are midline (a cut from the vagina directly towards the anus) and mediolateral (a cut from the vagina at an angle off to one side of the anus). Mediolateral is most commonly performed in the UK, whilst midline is favoured in the US and Canada. Rates of episiotomy vary widely between countries, units and individuals. National statistics on the use of episiotomy are of varying quality and for many countries are probably underestimated. Despite the well known relationship between parity and use of episiotomy (first time mothers having a higher probability of receiving an episiotomy

than mothers having subsequent babies), national statistics of the use of episiotomy by parity have not been systematically collected in most countries.

Approximately 70% of women in the UK experience some degree of perineal trauma and require stitches, though there is significant variation between NHS trusts⁵. The majority of these women will have short-term perineal pain and as many as 20% will continue to have long-term problems, such as pain during intercourse⁷. The World Health Organisation⁸ recommends an episiotomy rate of 10% as "a good goal to pursue", based on the data obtained by Sleep et al⁹.

The Research

Liberal versus conservative use of episiotomy

There is now wide acknowledgement that "routine" or liberal use of episiotomy cannot be justified by evidence that the benefits outweigh the harms and risks. However, one of the main questions remaining is "In what circumstances can 'restrictive' or conservative use of episiotomy be justified?"

There is fairly general agreement that episiotomy can be useful when monitoring during the second stage of labour suggests that the baby or the mother is becoming distressed, or that progress has ceased due to a rigid perineum⁷. However, in some systems of care, episiotomy is carried out for these reasons much more frequently than in others. And some practitioners use other methods in preference firstly to prevent distress or delay wherever possible, and secondly responding non-invasively before considering episiotomy, by suggesting a change of position, for example.

The Cochrane Library systematic review *Episiotomy for vaginal birth*¹⁰ assessed the effects of restrictive use of episiotomy

compared with routine episiotomy. Six studies, including both midline and mediolateral episiotomy were included in this review. In the routine episiotomy group, 72.7% (1752/2409) of women had an episiotomy, whilst the rate in the restrictive episiotomy group was 27.6% (673/2441). Overall, compared with routine use, restrictive use of episiotomy involved:

- Less posterior perineal trauma (damage or tears to the skin or muscles surrounding the vagina) (relative risk 0.88, 95% confidence interval 0.84-0.92).
- Less suturing (relative risk 0.74, 95% confidence interval 0.71-0.77).
- Fewer healing complications (relative risk 0.69, 95% confidence interval 0.56-0.85).
- More labial and anterior vaginal trauma (relative risk 1.79, 95% confidence interval 1.55-2.07).

There was no difference in:

- "Severe" vaginal or perineal trauma (third and fourth degree tears) (relative risk 1.11, 95% confidence interval 0.85-1.50).
- Dyspareunia (pain on intercourse or sexual dysfunction) (relative risk 1.02, 95% confidence interval 0.90-1.16).
- Urinary incontinence (relative risk 0.88, 95% confidence interval 0.79-1.2).
- Apgar scores less than seven at one minute in the baby (relative risk 1.09, 95% confidence interval 0.78-1.51).
- Admission to special care baby unit (relative risk 0.74, 95% confidence interval 0.46-1.19).

Separate analysis of the results for both mediolateral episiotomy and midline episiotomy were similar to the overall comparison. A single trial¹¹, which directly compared mediolateral with midline episiotomy, found an increase in third and fourth degree perineal tears with midline episiotomy, but was excluded from the review

because of poor methodological quality.

The review findings demonstrate clearly that there is evidence to support restrictive use of episiotomy rather than routine use. When parity is taken into account, the same conclusion is reached for first-time mothers as for all childbearing women.

Management & effects of perineal trauma

A central hypothesis underlying perineal management is that there is a relationship between perineal management at birth and subsequent long-term perineal function. A small study of 102 women from Chicago showed that perineal muscle strength and endurance was less in pregnancy than in the postnatal period. In addition, after controlling for variables that could make a difference (parity, maternal age, baby's birth weight, smoking status and ante partum scores) women's perineal muscle strength and endurance was greatest for those who had had a caesarean birth, followed by different kinds of vaginal birth. They were, in descending order, an intact perineum, a first degree tear, a second or third degree tear, and, finally, vaginal birth with an episiotomy. These results do not support the use of episiotomy for preserving perineal muscle function¹².

Severe perineal trauma

The proportion of third and fourth degree tears in the studies in the Carroli & Belizan review¹⁰ were in the range 1%-4%. Although thankfully the number of women affected is relatively small, after third and fourth degree ruptures, up to 85% of women have persistent sphincter defects, causing incontinence of wind or leaking of faeces. These anorectal complaints can have a major negative impact on women's self esteem and lifestyle. There is evidence that some cases of severe trauma go unrecognised and inadequately repaired¹³. However, up to 50% of

women have anorectal complaints, despite apparently adequate repair¹⁴. It is therefore highly important for the health service to:

- reduce the incidence of third and fourth degree tears, and
- train health professionals to identify the extent of trauma reliably and to repair appropriately.

Comparisons of midline and mediolateral episiotomy leading to third degree tears have produced varying results. Two of the randomised controlled trials included in the Carroli & Belizan review¹⁰ showed no protective effect of routine mediolateral episiotomy but the actual numbers are low¹⁵.⁹ Conversely, retrospective analysis of all vaginal births on the Dutch National Obstetric Database for 1994 and 1995 found that mediolateral episiotomy appeared to protect strongly against damage to the anal sphincter complex during birth (odds ratio 0.21 95% confidence interval 0.20-0.23)¹⁶.

Management to minimise negative effects

A systematic review of the literature looked at practices that minimise trauma to the genital tract in childbirth¹⁷. Numerous factors, related to the woman or the care she receives, have been suggested as potentially affecting the occurrence rates of genital tract trauma. Maternal nutritional status, body mass index, history of prior trauma, ethnicity, baby's birth weight and occiput posterior position of the baby's head at birth may partially determine the risk of trauma. While none of these factors can be altered by care at birth, their presence might prompt modifications to the plan of care. Maternal birth positions, style of pushing, techniques to relax the perineum, use of episiotomy, hand manoeuvres for perineal management, and the actual birth of the baby are factors which can be modified during maternity care.

Some of these aspects of management have been studied systematically to see what, if any, effect they have on perineal trauma and subsequent effects.

Pushing

The style of pushing (directed or forceful versus spontaneous) has not shown a clear effect on rates of perineal trauma. The only trial addressing this question had a small sample (n=32), so no conclusions could be drawn¹⁷.

Positions

In another relevant Cochrane systematic review, Gupta & Nikodem¹⁸ looked at the benefits and risks of different positions for labour and concluded that the results should be interpreted with caution as the quality of the 18 trials included in the review was variable. Use of any upright or lateral positions compared with supine or lithotomy positions were associated with a reduction in episiotomy (11 trials, odds ratio 0.73, 95% confidence interval 0.64- 0.84) and a small increase in second degree perineal tears (10 trials, odds ratio 1.30, 95% confidence interval 1.09-1.54).

A retrospective analysis of 2891 normal vaginal births in Australia found the lateral position (lying on one side) was associated with the highest rates of an intact perineum (66%), whilst the squatting position was associated with the least (44%). The differences associated with different positions, were greater for first time mothers¹⁹.

A retrospective study from Sweden, provides further information. During the late 1980s and early 1990s, a major shift in obstetric practice occurred; women were encouraged to choose their own position for birth and manual perineal protection was not practiced to the same extent as before. This was thought to have led to an increased risk of anal sphincter tears, which

increased from 0.7% in 1982 to 2.9% in 1996²⁰. Similar data are available from another Swedish hospital, where the rate of episiotomy for first time mothers fell from 26% in 1989 to just 6.6% in 1992-4, accompanied by a significant increase in severe tears over the same period from 1% to 2.3%. However, these additional severe tears may be explained, at least in part, by an increase in assisted deliveries that also occurred during this period²¹.

Perineal massage

Antenatal perineal massage appears to have some benefit in reducing tears, episiotomies and assisted deliveries in first time mothers particularly in those aged over 30. A randomised controlled trial of 861 first time mothers saw a reduction from tear rates of 75% in no-massage group to 69% in the massage group, which achieved statistical significance when adjusted for mother's age and baby's birth weight²². Massaging the perineum as the second stage of labour advances, sometimes with oil or the application of a hot pad, is designed to stretch the tissues and reduce the risk of trauma. Critics of perineal massage during labour suggest that touch may be a disruptive distraction, and that the increase in vascularity and oedema in tissues is counterproductive. Currently, the only available controlled comparison of this intervention found no difference in the risk of overall perineal trauma, although fewer women in the massage group had a third or fourth degree tear⁷.

Midwives' touch

A randomised controlled trial of 5471 women looked at alternative approaches to midwives' contact with a woman's perineum during the second stage of labour²³. The "hands on" method involved the midwife putting pressure on the baby's head and supporting (guarding) the perineum with her hands, while lateral flexion (sideways movement) of the

baby was used to facilitate the delivery of first one shoulder and then the other. The "hands poised" method involved the midwife keeping her hands poised but aiming not to touch the baby's head or the perineum, and allowing spontaneous birth of the shoulders. The rate of episiotomy was significantly lower in the "hands poised" group (relative risk 0.79, 95% confidence interval 0.65-0.99) and there were no significant differences in rates of tears or overall trauma between the two groups. However, when followed up ten days after the birth, more women in the "hands poised" group had experienced pain in the previous 24 hours (relative risk 1.10, 95% confidence interval 1.01-1.18). There were no significant differences in baby outcomes.

Immersion in water

In the Cochrane systematic review *Immersion in water in pregnancy, labour and birth*²⁴ no statistical difference was found in perineal trauma after vaginal birth between no immersion and immersion in labour. The evidence was restricted to a single randomised controlled trial and the reviewer's conclusion was that there was not enough evidence to evaluate the use of immersion in labour. Some qualitative research and audit results seem to indicate that using water may be beneficial. In a three year audit of all 541 women who used a birth pool at any time in labour in one Midlands hospital, in 1994-6, only five episiotomies were performed, almost half the women had an intact perineum, 16% had a first degree tear and in addition 12% had a graze or tear that was considered not to need stitching. Further trials are needed to explore what contribution immersion in water may make to protect the perineum.

Care provider

When the indications for episiotomy are restricted to clinical evidence of maternal or fetal jeopardy, episiotomy rates from different studies in the systematic literature review were found in the range of 8%-30%, with

rates of around 10% for unselected populations of mixed parity¹⁷. Women delivered by midwives with the lowest episiotomy rates have a higher frequency of an intact perineum. The retrospective study of 2891 normal vaginal births, referred to previously, 19 found a statistically significant association between perineal outcome and type of care provider (accoucheur). An intact perineum was achieved for 32% of those delivered by an obstetrician compared with 56%-61% for those delivered by one of three different categories of midwife. Midwives may place a higher value on achieving an intact perineum than other groups of accoucheurs. The highest episiotomy rates, in a study of hospitals in the US, tended to be associated with the highest rates of assisted births, caesarean sections, labour augmentation and induction in first time mothers²⁵.

Suture materials and methods

Cochrane reviews show that the use of absorbable synthetic suture material (polyglycolic acid, with trade names Dexon and Vicryl, or polyglactin sutures) reduces women's short term pain, with no significant difference in long-term pain or dyspareunia (pain on intercourse or sexual dysfunction) when compared with plain or chromic catgut suture material²⁶, and that a continuous subcuticular suture is associated with less pain for up to ten days after the birth compared with interrupted transcutaneous (below and above the skin) sutures²⁷. However, the subcuticular (below the skin) method of perineal skin closure is technically more difficult than the interrupted method, and the interrupted method is considered easier both to learn and less liable to cause problems in the hands of inexperienced operators⁷.

Key Points

- Liberal or routine use of episiotomy is associated with a medical model of childbirth and has been challenged. Overall, rates have fallen considerably from a high of 53% in England in the late 1970s.

One source which quoted episiotomy rates in 2001 for each country of the UK, showed the following range: England 15%, Scotland 13%, Wales 10% and Northern Ireland 22%²⁸. These are considerably lower than the 33% rate for the US in 2000. Liberal use of episiotomy is not supported by women's accounts or clinical evidence of effectiveness.

- There are no short-term (pain, blood loss, infection) or long-term benefits (urinary or sexual function, pelvic muscle tone) found with routine use of episiotomy and there is less trauma overall when episiotomies are restricted.
- Episiotomy is necessary in some situations when monitoring during the second stage of labour suggests that the baby or the mother is becoming distressed, or that progress has ceased due to a rigid perineum.
- Episiotomy rates still vary widely between different NHS Trusts in the UK. Some practitioners seem better at preventing distress or delay and consider non-invasive methods to maximise normal outcomes before considering episiotomy.
- The World Health Organisation recommends an episiotomy rate of 10% as "a good goal to pursue".
- After third and fourth degree ruptures, up to 85% of women have persistent sphincter defects, causing incontinence of wind or leaking of faeces, which can have a major negative impact on women's self esteem and lifestyle.
- It is important to reduce the incidence of severe tears and ensure that when they do occur health professionals identify and repair them appropriately.
- Some practices, including perineal massage during pregnancy and use of birth positions which enable the woman to expel the baby slowly, are known to reduce the incidence and extent of perineal trauma. However, many questions on minimising trauma and long-term effects remain unanswered.

- Absorbable synthetic suture material (polyglycolic acid, with trade names Dexon and Vicryl, or polyglactin) and continuous subcuticular sutures are associated with less pain in the immediate postnatal period than other materials or individual sutures.
- Further randomised controlled trials are needed to provide more complete and reliable evidence.



research alert

If you'd like to join the research egroup to receive the Current Awareness Bulletin, and research updates, go to: www.groups.yahoo.com/group/nct_research

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