A STUDY OF THE EFFECTS OF PERINEAL HEAT LAMP APPLICATIONS ON PATIENT'S PERCEPTION OF EPISIOTOMY PAIN

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF MASTER OF SCIENCE

IN THE GRADUATE SCHOOL OF THE

TEXAS WOMAN'S UNIVERSITY

COLLEGE OF NURSING

BY

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HOUSTON, TEXAS

MAY, 1975

Texas Woman's University

Denton, Texas

July 2 19 74

We hereby recommend that the thesis prepared under our supervision by Samuel Joyce Cook entitled A Study of the Effects of Perineal Heat Lamp Applications on Patient's Perception of Episiotomy Pain

be accepted as fulfilling this part of the requirements for the Degree of Master of Science

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ACKNOWLEDGEMENTS

This investigator wishes to express appreciation to Dr. Raymond Kaufman, Chairman of the Department of Obstetrics and Gynecology, Baylor College of Medicine, Houston, Texas, for granting permission to utilize the clinical facilities under his direction.

Sincere appreciation is also expressed to members of the in-service staff, the nursing personnel, and resident physicians of the clinical facility utilized who enthusiastically supported the investigator as the treatment modality was administered.

Sincere appreciation is also expressed to the patients who participated in this research, for without willing patients no nursing research can be conducted.

DEDICATION

The author wishes to dedicate this thesis to Sue Ann Compton, R.N. and Patricia Smith, R.N. for their profound influence upon the undergraduate nursing life of this investigator. These ladies gave unselfishly to guide and inspire higher goals of achievement in this author.

CHAPTER I

ORIENTATION TO THE STUDY

Introduction

It is an accepted fact that for the new mother the first few days of the puerperium are plagued with pain caused by an episiotomy wound (Bare and Fine 1963, p. 268). Often patients are told to bear this with fortitude and patience and it will gradually diminish.

The experience of this investigator as a nurse has assisted her in realizing that episiotomy pain affects the new mother in many ways. It increases the tendency of the mother to remain in bed when ambulation has proven desirable (Guerriero 1946, p. 212). Patients' fear of pain during defecation helps lead to an already existing tendency toward constipation (Harris 1970, p. 663). A burning sensation caused by the flow of urine over the episiotomy wound makes voiding a source of considerable annoyance (Lee 1961, p. 464).

Various authors offer their individual reasons for episiotomy pain. Shute (1959, p. 469) states that the major sources of episiotomy pain are edema and inflammation associated with any normal wound healing process. He further suggests a suturing technique which

he found results in less edema and less inflammation, thereby causing less pain.

Harris 1970, p. 663) agrees that edema and inflammation are major sources of episiotomy pain. He further states that the amount of edema and inflammation are the controlling factors in the amount of episiotomy pain perceived by patients. In a study of over 7,000 deliveries he found that the median type of episiotomy produces less edema and less inflammation than the mediolateral type of episiotomy, thereby resulting in fewer complaints of episiotomy pain.

Bumgardner and Zatuchni (1965, p. 517) agree that the median type of episiotomy produces less pain. They further suggest a regime of oral enzymes to reduce the amount of edema and inflammation encountered with the median type of episiotomy. Also suggested as possible causes of episiotomy pain are such mitigating factors as extent of the episiotomy wound, type of suture material used, and suturing skill of the attending physician.

Moir (1964, p. 910) argues with the above authors and says that the major cause of episiotomy pain is poor technique in repair of the wound. He further suggests improved repair techniques.

Numerous methods are available for the relief of

episiotomy pain. Nenno and Loehfelm (1973, p. 123) found a topical anesthetic which provided relief to the majority of patients which they studied. Spallacy (1965, p. 272) describes a medicated perineal pad which he believes provides adequate relief of episiotomy pain. Numerous studies have been done to determine the efficacy of various combinations of several common analgesics on episiotomy pain, all of which were shown to provide relief to some extent (Bloomfield Gassney and Howatt 1967, p. 515; Hopkinson Bartlett and Steffens 1973, p. 251). Numerous studies have also been conducted on several enzymatic preparations to determine the extent to which they relieve the edema and inflammation, and therefore the pain, associated with an episiotomy (Bumgardner and Zatuchni 1965, p. 514; Howat and Lewis 1972, p. 951).

The vast number of pain relief modalities would indicate that no one method provides relief of episiotomy pain adequately and consistently. There is, perhaps, another untested, but frequently used, technique that provides relief of episiotomy pain. This is the application of dry heat to the perineum at regular intervals during the immediate postpartum period. This technique is supported by Stillwell (1965, p. 234) in his statement, "the most common indication for local heating is the relief of pain."

Effects of Heat on Pain

Heat has the primary effect of increasing metabolism, which results in dilatation of superficial arterioles and capillaries and veins, all of which decrease edema and inflammation and therefore enhance the healing process (Stillwell 1965, p. 232). Novacs (1949, p. 190), in discussing the physiological basis of heat, expressed the opinion that hydriatic measures exert more influence on the distribution of blood supply to a given area than any medicinal measures.

Sweeney and Stoner (1951, p. 206) studied the thermal effects of hot and cold packs on skin, subcutaneous and deep muscle temperatures of three normal subjects. Even though the temperatures of each layer increased due to the peripheral vasodilatation, the authors speculated that the relief of pain may not be due to actually heating the tissue, but rather to equalization of the superficial and deep tissue temperatures.

Halsell (1967, p. 767) observed the effectiveness of hydrocollator packs applied to the incisional site of 108 patients after abdominal surgery. She found that in comparing a control group to an experimental group, the latter group required less analgesic.

Research into the use of heat as a pain relieving modality is plentiful, yet the consensus of authors

reviewed is that there is inadequate experimental evidence to support using heat for analgesic purposes.

It was the belief of this investigator that the application of heat to a wounded area will decrease the patient's perception of pain in the heated area, and therefore could be utilized in postpartum care for the purpose of providing relief of episiotomy wound pain.

Statement of the Problem

The problem was viewed as the following: episiotomy pain interferes with postpartum comfort. Various methods available for relief of this pain have failed to consistently provide adequate comfort. The frequently used, but undocumented, technique of applying a heat lamp to the perineum during the immediate postpartum period was suggested as another modality for relieving postpartum episiotomy pain.

Statement of the Purpose

The purpose was to determine if the application of a heat lamp applied routinely to the episiotomy site would decrease the patient's perception of pain caused by the episiotomy during the immediate postpartum period. This procedure is used by many physicians but to the knowledge of this investigator it has never been formally studied to determine its efficacy as a method of relief of the pain

associated with an episiotomy wound.

An attempt was made to answer the following question: was the amount of episiotomy pain perceived by an experimental group of women who had a heat lamp routinely applied to their perineums less than the amount of episiotomy pain perceived by a group of women who received no heat lamp applications to their perineums?

Assumptions of the Study

1. It was assumed that pain caused by the episiotomy wound existed after an episiotomy had occurred.

2. It was assumed that the proposed routine of heat lamp applications would provide the experience needed to answer the previously stated question.

Limitations of the Study

1. A small number of subjects were studied, thus limiting the scope and populations to whom the study can be generalized.

2. Individuals have different pain tolerance levels, thus making comparison of degrees of pain from one individual to another, or one group to another, very difficult.

3. Due to its subjective nature, pain is very difficult to measure, thus limiting the study by the inadequacy of the instrument available to measure the

degree of pain perceived by the patients.

Definitions

For the purpose of clarification, the following definitions and explanations of terms were established for use in this research:

1. Episiotomy: Incision of the perineum during the second stage of labor to avoid laceration of the perineum during expulsion of the infant. It must be of the medial type and may be sutured by any technique with any type of suture material (Oxorn and Foote 1968, p. 425)

2. Heat lamp applications: The use of a 20 watt bulb held in a metal or wooden frame box positioned between the knees of the patient about 6 inches from the perineum for 20 minutes twice daily (Bryant and Overland 1964, p. 538)

3. Immediate postpartum period: The 72 hours, or 3 days, immediately following the delivery of an infant.

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CHAPTER II

REVIEW OF LITERATURE

Introduction

The content of this chapter deals with discussion of research in the following areas:

1. The nature of pain perception
2. Factors affecting the perception of pain
3. Methods available for relief of episiotomy pain
4. The effect of heat on pain.

The Nature of Pain Perception

Pain is an individual experience. It is whatever the individual experiencing it says it is and exists whenever and wherever the individual says it does (McCaffrey 1972, p. 8). Bonica (1953, p. 1240) says that pain of any kind and from any source has two components: the perception of the painful sensation and the reaction to that sensation.

McCaffrey (1972, p. 2) states that those experiences which are described as painful have three common denominators which are:

1. A breech in a protective barrier or in the wholeness of the person

2. A signal that warns of danger

3. An unpleasantness.

There can be no absolute dividing line between these because each reinforces, or may produce, the other.

Pain caused by an episiotomy wound can be considered as a breech in a protective barrier, that being the skin and muscle layer of the perineum. Episiotomy pain is felt to originate in the inflammatory process normally occurring after a break in skin (Shute 1959, p. 469). The episiotomy wound covers a relatively small body area; it involves the vaginal mucosa, one muscle layer, fascia, and the skin (Hellman and Pritchard 1971, p. 426) as compared to large abdominal wounds which often involve the viscera, the peritoneum, muscles, fascia and skin (Gildea 1968, p. 81). Yet, patients having an episiotomy wound often complain of pain as severely as those having large abdominal wounds. Perhaps Cottingham (1964, p. 497) has an explanation for this in his belief that the intensity of pain perception arising from a given lesion is independent of the size and location of the lesion.

Factors Affecting the Perception of Pain

The factors contributing to the perception of and the degree of pain felt are many. Agreement does exist that the perception of pain varies widely in different

individuals and in the same individual under different circumstances (Farnsworth 1956, p. 560).

In discussing the individual's perception of pain, Farnsworth (1956, p. 561) makes the following statement:

> As pain becomes more severe a patient can only devote his attention to that portion of his body or personality that is affected. He speculates on its meaning, its threat to him, whether it is permanent or whether it can be eased or not, or whether it indicates he will lose a portion of his body or his life.

An example of this might be the incident of the woman who has waited and planned for a baby for several years; this woman may tolerate the discomfort of an episiotomy wound more easily than the adolescent whose baby was unwanted and unplanned.

In studying male civilian patients and wartime casualty patients, Beecher (1956, p. 1609) found that a major factor in the amount of pain experienced depends on what the injury means to the individual. In studying 150 male civilian surgical patients and 150 male military wartime patients with extensive injuries, he found that only 32% of the military subjects with extensive injuries needed narcotic analgesia as compared to 83% of the civilian surgical subjects. He explained this in the following way:

> In a situation in which a wound has great advantage and means escape from overpowering anxiety and fear of death on the battlefield, extensive wounds are associated with comparatively little pain. In a situation in which the wound connotes disaster (major surgery in civilian life) lesser wounds are associated with far more pain than in the former situation.

Another influencing factor in individual's perception of pain is the culture from which the individual comes. Various cultures allow their members to behave in their respectively defined ways. Zombrowski (1952, p. 19) well-illustrated this in his interviews with people of Italian, Jewish, and "Old American" descent. ("Old American" he defined as white, native born, usuallly protestant, whose grandparents at least were born in the United States, and who do not identify with any foreign group.)

Italians, he found, were very present oriented toward pain, with emphasis on immediate relief, without thought to the cause of pain. While both Italians and Jews allowed free expression of pain through words, sounds, and gestures, Jews were more future oriented in their response to pain, with emphasis on the significance of pain.

"Old Americans" were found to be a combination of these in that they are future oriented toward pain, as the Jews, and that they allow free expression of pain, as the Italians, but only in private. In the presence of others

"Old Americans" tend to minimize pain and to avoid complaining. However, in the presence of health care people "Old Americans" are free with their complaints of pain. They are also concerned with the significance of pain, as their Jewish counterparts.

Though not specifically related to pain, McCabe (1960, p. 1801) made some interesting observations about the Southern Negro culture in the hospital environment. She found that Southern Negroes frequently refer to pain as "the miseries" and that they believe the pain occurred because "something got in there." Also observed was that they often deny pain even in the presence of pain-causing diseases. Frequently the Southern Negro was hesitant to ask for relief of pain. McCabe (1960, p. 1804) suggested that behavioral modes utilized by the Southern Negro for comfort were humor, the use of terms of address such as "dearie" or "sweetie" or the use of religious practices.

Preparation for labor has long been an accepted practice for many physicians. Yet, preparation for the presence of episiotomy discomfort is totally neglected.

Egbert et al (1964, p. 825) conducted a study in preoperative preparation in which he visited 51 special care patients to discuss, in depth, their postoperative course. They were told they would feel pain and methods

of pain relief that was available to them. In comparing these patients with an equal number of control patients who were denied preoperative instructions, he found that postoperative narcotic analgesia was 50% less in the experimental group who received preoperative instructions.

Methods Available for Relief of Episiotomy Pain

The major factor felt by most authors reviewed to control the amount of pain caused by an episiotomy wound is the type of episiotomy wound utilized by the delivering physician. Harris (1970, p. 663) in over 7,000 deliveries, studied the median type of episiotomy and found that the patients stated almost no complaints of pain, even though sitz baths and heat lamps were rarely used.

Bumgardner and Zatuchni (1965, p. 514) at Temple University Hospital of Philadelphia, studied the effects of oral enzymatic preparations to control pain at the episiotomy site through reduction of edema and inflammation. The double blind technique was used to study 311 patients. Those in Group A were given the enzyme preparation and those in Group B were given a placebo.

Criteria for relief of pain consisted of the following:

1. Evaluation of pain by the patients while sitting and walking

2. A scale of edema ranging from 0, interpreted as no pain, to 3, interpreted as continous pain, as evaluated by the junior author

3. Number of analgesics requested daily.

Significant differences in the degrees of pain, edema, and inflammation were found. Also the use of analgesics was markedly reduced in those patients receiving the enzyme. The overall evaluation of pain by those patients receiving the enzyme was less than that of those patients receiving the placebo. This report concludes that oral enzymatic preparations are one possible method of episiotomy pain relief.

Attempting to conquer the problem of episiotomy pain, Shute (1959, p. 467) devised a regime of placing patients on a specific enzymatic preparation while in labor, and to last through the first 3 postpartum days, coupled with an episiotomy repair technique that brings all tissues into accurate apposition without permanent burial of any unnecessary suture material. Shute (1959, p. 472) states that at the time of his report he had used this regime in 416 episiotomy repair cases. Without discussing his methodology, he states that 97% of these patients had no pain after the third postpartum day and only 2% of the patients had moderate to severe pain after the fourth day.

Four years after Shute published his painless episiotomy regime, Strasheim (1064, p. 81), who had begun using Shute's technique at the time of Shute's publication, replicated Shute's study with only slight variation in the enzymatic preparation utilized. Strasheim (1964, p. 83) states that of 437 episiotomy repair cases, in which he used this regime, only 3 patients incurred any complications which caused pain after the third postpartum day. Strasheim (1964, p. 83) describes Shute's technique as "the answer to the age old problem of 'painful stitches' . . . simple and easy . . . absolutely effective and completely reliable."

Spellacy (1965, p. 272) conducted a double blind study at the University of Minnosota Medical School on 98 consecutively delivered primiparas, to evaluate the effectiveness of a medicated perineal pad, known as Tucks, in the relief of episiotomy pain. Evaluation was made by a questionnaire completed by the patients on the days of discharge, in which they rated their pain according to one of the following statements:

1. Made more comfortable
2. No help
3. Relieved some of discomfort
4. Relieved most of discomfort
5. Relieved discomfort completely.

Spellacy (1965, p. 272) found no difference in the pain responses between patients using the standard product and those using the product known as Tucks.

Pinkerton and Beard (1961, p. 1536), at Queen Charlotte Hospital in London, studied the effects of ice packs applied to the episiotomy wound of 50 patients. Having 50 women in an experimental group and 50 women in a control group, at 24 hours post delivery they found the perineums of those patients using ice packs less edematous and less inflammed than those not using ice packs. On the second postpartum day the patients were asked to evaluate their pain according to one of the following statements:

1. Free of discomfort
2. Uncomfortable
3. Painful
4. Very painful

Pinkerton and Beard (1961, p. 1536) found that of those women using ice packs, 86% said no discomfort or uncomfortable and 14% said painful or very painful. Of those women not using ice packs, 60% said no pain and 40% said painful or very painful, thus concluding that ice packs to the episiotomy wound helps reduce episiotomy discomfort.

Nenno and Loehfelm (1973, p. 123) studied the effects of a topical foam containing hydrocortisone

acetate 1% and pramoxine hydrocloride 1% on episiotomy pain. The preparation was applied to the perineums of 50 patients, beginning in the recovery room and 4 times daily thereafter while in the hospital. Each patient evaluated their pain according to the following scale:

1. Excellent---relieved discomfort completely
2. Good---improved considerably
3. Fair---helped a little
4. Poor---of no help

A coinciding evaluation of perineal edema of each patient was performed, and rated on a scale consisting of the following:

1. Excellent---no edema
2. Good---very little edema
3. Fair---obvious edema
4. Poor---suture line visibly swollen.

The authors found that all 50 patients stated that considerable relief from discomfort was obtained by using the medication, along with 70% of the patients having no edema on the first postpartum day, thus concluding that this preparation also helps relieve episiotomy discomfort.

Effect of Heat on Inflammatory Pain

The majority of authors consulted state that

episiotomy pain is caused by the inflammation normally occurring after any tissue injury. This is the body's attempt to localize the effects of the injury. There is first an increased blood flow to the injured site, and dilatation of the surrounding capillaries caused by the release of a histamine-like substance liberated by the tissues as they are injured. As blood and serum escape into the tissues the area, the perineum, becomes red, hot, and swollen. The increased blood flow brings with it special blood cells called phagocytes which ingest the dead tissue and remove them from the area. The inflammatory process diminishes as the phagocytes remove the debris and the extra blood flow is absorbed into the circulatory system (Zweifach 1965, p. 161).

The application of heat acts as a catalyst in removing the debris from the inflammed area. Stillwell (1965, p. 233) sums up the principle of heat application to an inflammed area in his statement, "the phagocytosis increases with temperature elevation, a factor of importance in the treatment of inflammation by heat." As heat penetrates the wound, blood flow is markedly increased, thus allowing more blood cells to enter into the inflammed area for faster removal of debris.

This investigator was unable to locate any research on the effects of heat specifically on episiotomy pain; therefore, it was the intent of this investigation to provide a comparative study of the effects of heat on patients' perception of episiotomy pain and to suggest the principles of heat application to an inflammed area as another method of providing episiotomy wound comfort.

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CHAPTER III

METHODOLOGY

Type of Research

This was a comparative study. By conducting an evaluation of pain relief between two groups of women, one group receiving a routing heat lamp application to the episiotomy wound and one group not receiving any heat lamp application, this investigator believed that comparisons could be made as to the effectivenss of the heat lamp on episiotomy pain relief between the two groups.

Development of a Tool

In surveying the literature this investigator found that patients' statements of pain, the amount of analgesia requested, and the amount of edema present were the most frequent indicators of episiotomy pain being present. Therefore, this investigator developed a subjective questionnaire to evaluate the patients' perception of perineal pain as rated on the following five point scale:

1. Always---interpreted as always being free from perineal pain

2. Most of the time---interpreted as being free

from perineal pain more often than not

3. Half of the time---interpreted as being free from perineal pain half of the time and in perineal pain half of the time

4. Occasionally---interpreted as being more often in perineal pain than not in perineal pain

5. Never---interpreted as being never free from perineal pain. (Appendix I)

Responses of "always" and "most of the time" were considered as positive responses, and indicated that the patient was free of perineal pain a greater amount of time than she was in perineal pain while performing the activity stated in the question. Responses of "occasionally" or "never" were considered negative responses and indicated that the patient was in perineal pain a greater amount of time than she was free of perineal pain while performing the activity stated in the question. Responses of "half of the time" were considered neutral responses and indicated that the patient spent equal amounts of time in perineal pain and free from perineal pain while performing the activity stated in the question.

In addition to the questionnaire, the perineum of each patient in both groups was visualized twice each day and the amount of perineal edema rated on a

scale from 0 to 3+. Interpretation of each rate was based on the following scale:

1. 0---interpreted as no edema visible

2. 1+---interpreted as edema visible in the suture line only

3. 2+---interpreted as the suture line edematous and inflammed appearing

4. 3+---interpreted as the suture line and surrounding area edematous and inflammed appearing.

Additional information was recorded as to the type, frquency, mode of administration and indication for all pain medication given each patient.

Setting and Population

The location of this study was a large city-county hospital in the Southwestern United States, which services primarily low income families, 80% of which are Black, 12% of which are Latin American, and the remaining 8% of which are White. Patient payment for services range from no pay to full pay based on family or individual income evaluation. The hospital provides no private rooms, only 2 bed and 4 bed wards for any type of patient.

The obstetrical department delivers approximately 10,000 babies annually, with medical care being provided by medical students, interns, and resident physicians.

The ages of delivering mothers range from approximately 12 years to 40 years of age. Bed capacity for maternity patients is 150. These are divided into 3 groups, separated by floors into the following catagories:

1. Adolescent patients who have special adult development programs

2. Uncomplicated postpartum patients 18 years of age and above

3. Complicated deliveries and those patients requiring Caeseran section, regardless of age.

Uncomplicated postpartum care consists of being ambulatory within 12 hours after delivery, thus allowing time for the routine saddle block anesthesia to be metabolized and excreted from the body. Perineal care consists of warm soapy water being administered by the patient after each voiding and each bowel movement. "Routine" pain medication consists of Ascodeen 30 milligrams every 4-6 hours as needed for pain from any source. No external application of cold, heat, or medication in any form is routinely used for any patient for any analgesic purposes. It is the practice of the nursing personnel (licensed vocational nurses and registrared nurses only) to chart on the patient's medication record the type and amount of analgesic given and to record the purpose of the medication in the nurses'

notes. Uncomplicated postpartum patients are discharged after 3 p.m., usually on their third postpartum day.

Sample Selection

The study sample was derived from the described population and met the following criteria:

1. Ages 18-35 (of legal age)
2. English-speaking and able to read and write the English language
3. No diagnosis of or apparent indication of mental retardation
4. Primigravida
5. Vaginal delivery
6. Midline episiotomy
7. Free of complications which introduce a component of perineal pain, specifically, no hemorroids, no cervical, vaginal, or rectal lacerations, and no condylomas. Due to the frequency of preeclampsia among the described population it was noted for the purpose of this study that mild preeclampsia, as defined by Hellman and Pritchard (1971, p. 689), was not considered a complication because it does not predispose the patient to perineal pain. Pre-existing conditions such as diabetes and renal diseases were considered complications due to their vascular effects which may decrease

peripheral sensation perception.

Method of Potential Sample Selection

The method of sample selection was by random assignment in the following manner: potential sample subjects were selected from the primigravida clinic population of the hospital. To be included in the study these primigravida patients had only to be of legal age, read and write and speak English, and be mentally competent, as reflected by the patient's clinic chart. No personal contact between potential subject and investigator took place at this time. A request was made that this investigator be notified after delivery of each potential sample subject was complete. Due to the fact that the clinic chart is always obtained when a patient is admitted to the labor area, this request was placed on the front of each patient's clinic chart.

Method of Final Sample Selection

Within 12 hours after each of the potential sample subjects had delivered, the investigator extensively reviewed the labor and delivery record of the patient. If the patient failed to meet all of the previously stated criteria, that is, if she failed to have a vaginal delivery, if she did not have a midline episiotomy, or if she did have perineal complications, she was at this

point excluded from the final sample. The first potential sample subject to deliver and meet all of the criteria was assigned to the control group, hereafter referred to as Group C, thus becoming a member of the final sample. The second potential sample subject to deliver and meet all of the criteria was assigned to the experimental group, hereafter referred to as Group E, thus becoming a member of the final sample. This modified sequential sampling method was continued throughout the list of potential sample subjects until a total of 10 patients had been assigned to each group.

Procedure for Obtaining Patient Consent

At the time that final group assignments were made, the investigator visited each patient for the purpose of explaining the study and obtaining the patient's permission to be included in the study group. In the presence of a witness, each patient was asked to read and sign a legal consent form allowing the investigator to perform the research. (Appendix II)

Method of Data Collection

At the time of assignment to the control and experimental groups and after the patient had given her permission for inclusion in the study, a flow sheet, developed by the investigator was placed on the front of

each patient's hospital chart. The flow sheet contained the following information:

1. Group assignment (C or E)
2. Sequential patient number
3. Date and time of delivery
4. Column for date and time of heat lamp applications
5. Column for date and time of requests for analgesics and indication for the medications
6. Column for degree of perineal edema present on each visit to the patient. (Appendix III)

Method of Treatment

The investigator began the application of the heat lamp to the perineum of the members of Group E between 5 hours and 23 hours post delivery. The investigator visited the members of Group E once on the 7-3 shift and once on the 3-11 shift for the purpose of performing the heat lamp procedure. Records of each time the heat lamp was applied were kept on the aforementioned flow sheet. The amount of visible perineal edema was also evaluated and recorded at these visits.

No heat lamp was applied to the perineum of the members of Group C unless they specifically asked for it.

which was an indication for deletion from the study. The investigator visited each member of Group C once on the 7-3 shift and once on the 3-11 shift for the purpose of evaluating and recording the amount of visible perineal edema.

Administration and notation of analgesics was performed by nursing personnel.

Method of Questionnaire Completion

On the morning prior to afternoon discharge, the investigator visited each patient for the purpose of completing the questionnaire. This was done in the following manner: after recording the sequential patient number and the group letter code on the questionnaire, the investigator handed the questionnaire to the patient, read the instructions with the patient, and allowed the patient to ask questions regarding the directions. When it had been determined that the patient understood the directions, the investigator instructed the patient that she was allowed as much time as needed to complete the questionnaire. The investigator also instructed the patient that the investigator would be at the nurses' station and therefore available to answer questions regarding the directions which might arise while completing the questionnaire.

While each patient was completing the questionnaire, the investigator extensively reviewed the medication record and nurses' notes of the patient to determine the type, route of administration, date and time and the purpose (i.e. site of pain) of all analgesia given to the patient. This information was transposed to the previously mentioned flow sheet, which then became one source of data, along with the questionnaire completed by the patient.

Analysis of Data

Data were analyzed by descriptive statistics.

FOOTNOTES

Lewis H. Hellman and Jack A. Pritchard. 1971. Williams obstetrics, p. 689. New York: Appleton-Century-Crofts.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF FINDINGS

Material in this chapter deals with this investigator's attempts to answer the question: Will the amount of episiotomy pain perceived by an experimental group of ten women receiving a perineal heat lamp application for twenty minutes twice daily be less than the amount of episiotomy pain perceived by an equal group of women not receiving a heat light application to their perineums?

Each group was evaluated in a three fold manner as follows:

1. The amount of perineal edema present each time the investigator visited the patient

2. The amount of analgesic medication requested by and therefore administered to the patient for relief of episiotomy pain

3. Each patient's subjective statements of episiotomy pain as evidenced by a questionnaire given each patient on her day of hospital discharge.

Patients were seen between 3 and 5 times depending on the number of days hospitalized for postpartum recovery.

Experimental patients had the heat lamp applied to their perineums each time the investigator visited the patients, beginning with the initial visit. All patients had the degree of perineal edema present evaluated each time the investigator visited the patient, beginning with the initial visit. The time interval between delivery and first visit by the investigator ranged between 5 hours and 23 hours, with most patients being visited the first time at about 14 hours post delivery.

Analysis of Perineal Edema

A 3 point scale was used to evaluate the degree of perineal edema. (Appendix IV)

All members of the control group had some degree of perineal edema present when first evaluated. Three of the 10 control patients had 3+ perineal edema when initially evaluated. Six of the 10 control patients had 2+ perineal edema when initially evaluated. One patient had only 1+ perineal edema when initially evaluated at 6 hours post delivery. However, this patient had 2+ perineal edema when evaluated at 24 hours post delivery. On the second day of evaluation no control patient had 3+ perineal edema. Seven of the control patients had 2+ perineal edema and 3 control patients had 1+ perineal edema. On the third day of evaluation 2 of the 10 control patients had 2+ perineal

edema, 6 of the 10 control patients had 1+ perineal edema, and 2 of the control patients had no perineal edema present.

This decrease of perineal edema on the second and third days points to the possibility that a gradual decrease of edema takes place even in the absence of any perineal treatment. Even though a gradual decrease did take place, it should be noted that 2 of the 10 patients were discharged with 2+ perineal edema and 6 of the patients were discharged with 1+ perineal edema.

The literature offers suggestions, other than the with-holding of the perineal heat lamp, which could be considered as possible explanations for the remaining degrees of edema observed in members of the control group. These are as follows:

1. Those patients having greater degrees of edema possibly experienced a greater extent of trauma to the perineam during the delivery (Harris 1970, p. 664)

2. Improper timing of the episiotomy in that it was delayed until irreparable damage had already occurred (Laufe and Leslie 1972, p. 773)

3. Differences of suturing skill of the attending physician (Bumgardner and Zatuchni 1965, p. 517)

4. Differences in the rate at which the patient's circulatory system absorbed the extra blood flow which had

accumulated at the episiotomy site (Zweifach 1965, p. 162).

All members of the experimental group also had some degree of perineal edema when initially visited and evaluated. Two of the 10 experimental patients had 3+ perineal edema upon initial evaluation. Seven of the 10 patients had 2+ perineal edema when first evaluated, and 1 of the 10 experimental patients had 1+ perineal edema at first evaluation. In these women there was a dramatic decrease of perineal edema on the second postpartum day. No patient had either 3+ or 2+ perineal edema and only 2 patients, of the 10, had 1+ perineal edema. The third day resulted in an even more dramatic decrease in perineal edema for members of the experimental group. Only 2 of the 10 patients had any perineal edema at all, that being 1+ prrineal edema. Eight of the 10 patients were discharged on their third postpartum day with the complete absence of perineal edema.

A comparison of the degrees of perineal edema between the members of the two groups revealed the following:

1. On the first day the amount of perineal edema present was almost the same for members of both groups

2. On the second day members of the experimental group consistently exhibited less perineal edema than

members of the control group

3. On the third day, the day of hospital discharge for all patients, perineal edema had almost abated in members of the experimental group, while members of the control group continued to exhibit degrees of perineal edema which the literature (Bare and Fine 1963, p. 269) suggests is indicative of perineal pain being present.

TABLE I---Comparison of Degrees of Perineal Edema between Control and Experimental Groups

Day postpartum	Group	Degrees of edema			
		3+	2+	1+	0
First day	Control	3	6	1	0
	Experimental	2	7	1	0
Second day	Control	0	7	3	0
	Experimental	0	0	8	2
Third day	Control	0	2	6	2
	Experimental	0	0	2	8

Medication for Perineal Pain

A total number of 22 medications for pain were requested by and administered to members of the control group. However, review of the patients' nurses' notes evidenced that 2 of the medications were for the purpose of relief of headache; therefore, the total number of medications for perineal pain requested by and administered to members of the control group was 20. For members of the control group the length of time between delivery and initial requests for analgesia ranged from a minimum of 7½ hours to 62 hours post delivery. Members of the control group requested analgesia 7 times during the first 24 hours post delivery, with 3 control patients being medicated once and 2 control patients being medicated twice during this time period. Requests for analgesia by members of the control group during the second postpartum day totaled 9. No control patients were medicated more than once during the second postpartum day. Four control patients were medicated during the third postpartum day, and again no control patients were medicated more than once during the third postpartum day.

The total amount of analgesia requested by and administered to members of the experimental group was 6 doses of the routinely used drug. One experimental patient had medication 3 times, these times being 3 hours, 12

hours, and 39 hours post delivery. Three experimental patients had medication 1 time each, with 2 of these being at 15 hours post delivery and 1 being at 17 hours post delivery. Six experimental patients had no analgesia at all.

TABLE 2---Comparison of Analgesia Required by Members of Control and Experimental Groups

Day postpartum	Group	Times medicated		
		1x	2x	3x
First day	Control	3	2	0
	Experimental	3	1	0
Second day	Control	0	0	0
	Experimental	1	0	0
Third day	Control	4	0	0
	Experimental	0	0	0

Comparison of the two groups revealed that several points of difference existed which supported the opinion of the investigator that the application of a perineal heat lamp to the episiotomy site decreases the amount of

perineal pain perceived by patients experiencing an episiotomy. These differences are as follows:

1. Members of the experimental group had 70% less total number of analgesic requests than did the members of the control group

2. Six of the members of the experimental group had no requests for analgesia at all while only 1 of the control patients failed to request any analgesia

3. Patients in the experimental group had only 1 request for analgesia after application of the heat lamp had begun. This request occurred during the second postpartum day, as compared to 9 requests on the second postpartum day by members of the control group

4. In both groups the majority of requests for analgesia occurred at the same times during the postpartum period that the greatest degrees of perineal edema existed, and that as the perineal edema decreased so did the requests for analgesia.

Questionnaire Response

Questionnaire rsponses were grouped in the following manner. The response was considered a positive response if the patient answered "always" or "most of the time," indicating that she was free of perineal pain a

greater amount of time than she was in perineal pain while performing the activity stated in the question. The response was considered a negative response if the patient answered "occasionally" or "never," indicating that she was in perineal pain a greater amount of time than she was free of perineal pain while performing the activity stated in the question. The response was considered a neutral response if the patient answered "half of the time," indicating that she spent equal amounts of time in perineal pain and free of perineal pain while performing the activity stated in the question.

Each question was reviewed individually for comparison between control and experimental groups. The results are discussed below.

Question No. 1: Have you been able to walk upright, without limping, or leaning to the side and be free from discomfort in your vaginal area?

Members of both groups responded to this question exactly in the same manner, 3 in a positive direction, 2 in a negative direction, and 5 in a neutral position, indicating that the majority of patients spent equal amounts of time in perineal pain and free from perineal

pain while walking. This would seem to suggest that the heat lamp has no effect on increasing perineal comfort while walking.

TABLE 3---Comparison of Patient Responses to Question Number 1

Control Group	Experimental Group
3 positive	3 positive
2 negative	2 negative
5 neutral	5 neutral

Question No. 2: Have you been able to sit on both buttocks in a normal sitting position and be free from discomfort in your vaginal area?

The response to this question of patients in both groups followed the same trend as in the previous question, in that they exhibited very few differences. In the control group 4 patients responded positively, 4 negatively, and 2 neutrally, as compared to the experimental group in which 3 responded positively, 4 negatively, and 3 neutrally. This would seem to suggest that the heat lamp does not alter patients comfort while sitting.

TABLE 4---Comparison of Patient Response to Question Number 2

Control Group	Experimental Group
4 positive	3 positive
4 negative	4 negative
2 neutral	3 neutral

Question No. 3: Has sitting on a pillow made you free from discomfort in your vaginal area?

Several patients failed to respond to this question, stating that they had not tried the pillow. At the time that the investigator became aware of this happening, it became a practice of the investigator to suggest to every patient in both groups that she try the pillow when she became uncomfortable. This suggestion was made only for the purpose of enabling the patient to answer the question. No endorsement of the pillow as a comfort measure was made.

Of the 10 patients in the control group, 7 answered the question, 5 positively, and 2 negatively. Of the 10 patients in the experimental group, 8 answered the question, 7 in a positive direction, and 1 in a negative direction. These results suggest that for those patients who responded to the question, perineal comfort was increased while sitting

on the pillow, without respect to the application of the perineal light.

TABLE 5---Comparison of Patient Responses to Question Number 3

Control Group	Experimental Group
5 positive	7 positive
2 negative	1 negative
3 did not answer	2 did not answer

Question No. 4: Have you been able to raise from a lying in bed position to a sitting position and be free from discomfort in your vaginal area?

Members of the control group answered this question with 4 responding in a positive direction, 4 responding negatively, and 2 responding neutrally. Members of the experimental group were slightly different in their responses with 2 answering positively, 3 answering negatively, and 5 answering neutrally. In view of the variety of responses from both groups of patients, it would seem that the application of a perineal heat light does not alter the patients' perception of perineal pain while rising from a lying in bed position to a sitting position.

TABLE 6---Comparison of Patient Responses to Question Number 4

Control Group	Experimental Group
4 positive	2 positive
4 negative	3 negative
2 neutral	5 neutral

Question No. 5: Have you been able to raise from a sitting position to a standing position and be free from discomfort in your vaginal area?

Responding to this question members of the control exhibited a majority of responses in the neutral position, with 5 being neutral, 4 responses being positive, and 1 response being negative. Members of the experimental group evidenced a definite positive trend with 6 patients responding positively, 2 patients responding negatively and 2 patients responding neutrally. This would seem to suggest that either pain does not exist while rising from a sitting to a standing position or that the heat lamp increases comfort while making this position change.

TABLE 7---Comparison of Patient Responses to Question Number 5

Control Group	Experimental Group
4 positive	6 positive
1 negative	2 negative
5 neutral	2 neutral

Question No. 6: Have you been able to move from a standing position to a sitting position and be free from discomfort in your vaginal area?

Four members of the control group responded to this question positively, 2 patients responded negatively, and 4 patients responded neutrally. Members of the experimental group were slightly different with only 2 members responding positively, 3 responding negatively, and 5 neutrally. These results would suggest that pain exists when changing from a standing to sitting position and that no positive effect is obtained from use of the perineal heat lamp.

TABLE 8---Comparison of Patient Responses to Question Number 6

Control Group	Experimental Group
4 positive	2 positive
2 negative	3 negative
4 neutral	5 neutral

Question No. 7: Have you been able to change from a sitting position to a lying in bed position and be free from discomfort in your vaginal area?

Responses to this question were very similar in both groups, with each group answering 4 positively; control group answering 2 negatively and 4 neutrally, and experimental group answering 1 negatively and 5 neutrally. This would seem to indicate that the application of a perineal light probably has no effect on perineal pain while changing from a sitting position to a lying in bed position.

TABLE 9---Comparison of Patient Responses to Question Number 7

Control Group	Experimental Group
4 positive	4 positive
2 negative	1 negative
4 neutral	5 neutral

Question No. 8: While lying in bed have you been able to reach, such as reaching for a glass of water, and be free from discomfort in your vaginal area?

Patient responses to this question were very similar for both groups. Patients in both control and experimental groups responded with 7 positive answers. However, the control patients stated 1 negative and 2 neutral answers, while experimental patients stated 3 negative and no neutral answers. These results would seem to indicate that probably no pain exists while performing the stated activity.

TABLE 10---Comparison of Patient Responses to Question Number 8

Control Group	Experimental Group
7 positive	7 positive
1 negative	3 negative
2 neutral	0 neutral

Question No. 9: Have you been able to bend at the waist, such as bending for your suitcase, and be free from discomfort in your vaginal area?

Patient responses to this question were again very similar. In the control group 7 patients answered positively, 2 patients answered negatively, and 1 patient answered neutrally. In the experimental group 6 patients answered positively, 3 patients answered negatively, and 1 patient answered neutrally. These results would suggest that perhaps no perineal pain exists while bending at the waist.

TABLE 11---Comparison of Patient Responses to Question Number 9

Control Group	Experimental Group
7 positive	6 positive
2 negative	3 negative
1 neutral	1 neutral

Question No. 10: Have you been able to assume the position of sitting on the commode and be free from discomfort in your vaginal area?

Positive responses to this question were similar in that the control patients gave 3 positive answers and experimental patients gave 4 positive answers. The major difference exhibited was in the negative responses where the control patients gave 6 negative answers and the experimental patients gave only 2 negative responses. Control patients gave 1 neutral response while experimental patients gave 3 neutral responses. This would indicate that in this study those receiving the heat lamp applications were made more comfortable sitting on the commode than those not receiving the heat lamp applications.

TABLE 12---Comparison of Patient Responses to Question Number 10

Control Group	Experimental Group
3 positive	4 positive
6 negative	3 negative
1 neutral	3 neutral

In review of the patients' questionnaire responses it would seem that the patients' subjective perception of perineal pain was unaltered by the application of a perineal heat light twice a day.

Summary

In summary, it appeared that those patients who received the perineal heat lamp consistently exhibited lesser degrees of perineal edema than did those patients from whom the perineal heat lamp was with-held. During the initial 24 hours post delivery the amount of medication required by both groups was approximately the same. However, after application of the heat lamp was begun, experimental patients consistently requested less analgesic for episiotomy pain than did control patients. Overall, patients subjective statements of perineal pain

caused by the episiotomy wound failed to show that the heat lamp had any effect on increasing perineal comfort during activity.

FOOTNOTES

Wesley W. Bare and Edward S. Fine. 1963. Prophylaxis of episiotomy pain: a controlled study of oral trypsin on the postpartum course. American Journal of Obstetrics and Gynecology. 87:268.

Heath D. Bumgardner and Gerald Zatuchni. 1965. Prevention of episiotomy pain with oral chymotrpsin. American Journal of Obstetrics and Gynecology. 92:517.

Robert E. Harris. 1970. An evaluation of the median episiotomy. American Journal of Obstetrics and Gynecology. 108:864.

Leonard E. Laufe and David C. Leslie. 1972. The timing of episiotomy. American Journal of Obstetrics and Gynecology. 114:773.

B.W. Zweifach. 1965. Microvascular aspects of tissue injury. The Inflammatory Process, p. 162. New York: Academic Press.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of the Study

It is accepted by most authorities that perineal pain exists after an episiotomy wound has occurred. Various approaches have been utilized seeking relief of this pain, including the use of perineal heat lamp applications during the immediate postpartum recovery period. This study attempted to determine if the application of the heat lamp did indeed reduce the amount of perineal pain caused by the episiotomy wound perceived by patients.

Two groups of women were selected and matched for parity, type of delivery, and type of episiotomy. One group received a perineal heat lamp application twice daily while the perineal heat lamp was with-held from members of the other group. Determination of the effect of the heat lamp on perineal pain was performed in 3 ways, which were as follows:

1. Evaluating twice daily the degree of perineal edema present on each patient

2. Reviewing the amount of analgesia requested by

and administered to each patient for the purpose of relieving episiotomy pain

3. A subjective questionnaire completed by each patient regarding the amount of perineal pain perceived while performing potentially pain producing activities.

Descriptive statistics were utilized to examine any differences in the responses of the two groups. It was found that experimental patients who had the perineal lamp applied to their perineum twice daily consistently exhibited lower degrees of perineal edema than did those control patients from whom the perineal lamp was with-held. It was noted that control patients did experience a gradual decrease in perineal edema, but at a much slower rate of decrease than experimental patients. It was also found that experimental patients requested 70% less medication for episiotomy wound pain than did control patients. However, the patients' subjective statements of perineal pain during potentially pain producing activities failed to show that the application of a perineal lamp decreased the patients' perception of episiotomy wound pain.

Conclusions

1. Perineal edema caused by an episiotomy wound gradually abated without treatment, but the rate of

decrease in perineal edema was greatly enhanced by the application of the perineal heat lamp.

2. The amount of analgesia requested by and administered to patients for episiotomy pain was greatly reduced after application of the perineal heat lamp was begun.

3. Episiotomy pain while performing potentially pain producing activities was unaffected by the application of the perineal heat lamp.

Recommendations

The investigator recommends the following:

1. Replication of the study be carried out with a variety of target populations to determine if the trend indicated in this study was indicative of the general population of women experiencing perineal episiotomy

2. A study be done to explore the discrepancy identified in this study between patients' subjective perception of pain and the amount of analgesia for pain requested

3. That nurses working on obstetrical postpartum units be made aware of the potential role of the heat lamp in decreasing perineal edema and decreasing the amount of analgesia required by patients for episiotomy pain.

APPENDIX I

PATIENT QUESTIONNAIRE

INTRODUCTION

You are being asked to complete this questionnaire regarding the amount of discomfort that you have experienced as a result of the childbirth process. As you know, during the delivery of a baby it is often necessary to cut the vaginal area of the mother to allow enough room for the safe delivery of the baby. This incision is called an episiotomy. After the delivery is complete the doctor sews, or sutures, this small incision, which is the stitches that you feel. The healing of this area causes different women different amounts of discomfort. You know that for the past three days I have visited you to observe how well your stitches are healing. Now it is your turn to share with me how much discomfort you have experienced in your vaginal area as a result of your episiotomy. This questionnaire contains ten questions which have been designed to evaluate episiotomy discomfort. Please complete each one individually as it relates to the amount of discomfort that you have experienced in your vaginal area over the past three days. Directions for completing the questions are given on the next two pages. Please read them very carefully.

Please feel assured that completing this questionnaire does not obligate you in any way. To protect your confidentiality please do not sign your name to the questionnaire.

DIRECTIONS FOR COMPLETING QUESTIONNAIRE

As you look through the questions you will find that each question has five possible answers: the first one is always, the second one is most of the time, the third one is half of the time, the fourth one is occasionally, and the fifth one is never.

You will need to know what each of these possible answers mean, therefore, I will define them for you and you may look back at these definitions as you progress through the questionnaire:

1. Always---means that you have been free from discomfort in your vaginal area all of the time

2. Most of the time---means that you have been free from discomfort in your vaginal area more often than you have been uncomfortable

3. Half of the time---means that you have been free from discomfort in your vaginal area about the same amount of time that you have been uncomfortable in your vaginal area

4. Occasionally---means that you have been free from discomfort in your vaginal area less often than you have been comfortable in your vaginal area

5. Never---means that you have never been free from discomfort in your vaginal area.

Now that you know what each of the possible answers mean, let us consider an example of how you might answer question number one, which states, "Have you been able to walk upright, without limping, or leaning to the side and be free from discomfort in your vaginal area?" As you consider the question think about the times you have walked to the bathroom or to see your baby. How much discomfort in the vaginal area did you experience? Were you free from discomfort all of the time? If so, circle always. Were you free from discomfort half of the time and uncomfortable half of the time? If so, circle half of the time.

Follow this procedure with each question: read it, consider it, make a decision which describes the amount of discomfort that you have experienced in your vaginal area while performing the activity stated in the question, then circle the choice you made.

Please allow me at this time to say thank you for completing this questionnaire.

QUESTIONS

Please answer according to previous page directions.

1. Have you been able to walk upright, without limping, or leaning to the side and be free from discomfort in your vaginal area?

Always Most of the time Half of the time

Occasionally Never

2. Have you been able to sit on both buttocks in a normal sitting position and be free from discomfort in the vaginal area?

Always Most of the time Half of the time

Occasionally Never

3. Has sitting on a pillow made you free from discomfort in your vaginal area?

Always Most of the time Half of the time

Occasionally Never

4. Have you been able to raise from a lying down in bed position to a sitting position and be free from discomfort in your vaginal area?

Always Most of the time Half of the time

Occasionally Never

5. Have you been able to raise from a sitting position to a standing position and be free from discomfort in your vaginal area?

Always Most of the time Half of the time

Occasionally Never

6. Have you been able to move from a standing position to a sitting position and be free from discomfort in your vaginal area?

Always Most of the time Half of the time

Occasionally Never

7. Have you been able to change from a sitting position to a lying in bed position and be free from discomfort in your vaginal area?

Always Most of the time Half of the time

Occasionally Never

8. While lying in bed have you been able to reach, such as reaching for a glass of water, and be free from discomfort in your vaginal area?

Always Most of the time Half of the time

Occasionally Never

Have you been able to bend at the waist, such as bending for your suitcase, and be free from discomfort in your vaginal area?

Always Most of the time Half of the time

Occasionally Never

10. Have you been able to assume the position of sitting on the commode and be free from discomfort in your vaginal area?

Always Most of the time Half of the time

Occasionally Never

APPENDIX II

PATIENT CONSENT FORM

PATIENT CONSENT FORM

I, _____, do hereby give my permission to be included as a participant in a research study concerning the amount of discomfort women experience from an episiotomy wound. I understand that I may or may not have a heat lamp applied to my vaginal area and that the investigator will visit me twice daily for the purpose of observing my vaginal area. I understand that on the third day after my delivery I will be asked to complete a questionnaire regarding the amount of discomfort I have experienced. I understand that I may refuse to continue to participate in the study at any time. I futher understand that no personal information will be required for this study and that I will not be required to sign my name to any form except this consent form.

Date _____

Participant _____

Witness _____

APPENDIX III

INFORMATION INCLUDED ON PATIENT FLOW SHEET

GROUP ASSIGNMENT--C--E

SEQ. PATIENT NO.--1-2-3-4-5
6-7-8-9-10

HEAT LAMP APPLICATIONS

Date Time

DATE OF DELIVERY

TIME OF DELIVERY

EDEMA RATE

Date Time

MEDICATION GIVEN

Drug Time Date Purpose

APPENDIX IV

PERINEAL EDEMA SCORING SCALE

PERINEAL EDEMA SCORING SCALE

The scale utilized in this study for evaluating degrees of perineal edema was suggested by Bare and Fine (1963, p. 269).

The scale consisted of the following:

1. 0 perineal edema---indicated that there was no perineal edema present

2. 1+ perineal edema---indicated that edema was visible in the episiotomy suture line only

3. 2+ perineal edema---indicated that the episiotomy suture line was both edematous and inflammed appearing

4. 3+ perineal edema---indicated that the suture line and surrounding area was edematous and inflammed appearing.

APPENDIX V

AGENCY PERMISSION

PHYSICIAN'S CONSENT FORM

I, Reynold Carlson, M.D., grant to Samuel Joyce Cook, a student enrolled in the Maternal-Child Health Nursing program leading to a Master's Degree at Texas Woman's University in Houston, Texas, my permission to utilize patients at Jefferson Davis Hospital in Houston, Texas in order to study the effects of heat lamp applications on patient perceived episiotomy pain. I understand that the above student will perform the following procedures:

(1) The application of a perineal heat lamp to ten patients, and the omission of a perineal heat lamp from ten patients

(2) Visiting of each patient daily to evaluate the degree of perineal edema present

(3) Reviewing the chart of each patient for the purpose of recording analgesia given to the patient for episiotomy pain

(4) Administering a questionnaire to each patient.

It is my understanding that written permission of each patient will be obtained and that any patient has the privilege of withdrawing at any time.

Date 5/20/74

Signature of Physician Reynold Carlson M.D.

TEXAS WOMAN'S UNIVERSITY
College of Nursing
Denton, Texas 76204

DALLAS CENTER
1810 Inwood Road
Dallas, Texas 75235

HOUSTON CENTER
1130 M. D. Anderson Boulevard
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Jefferson Davis Hospital

GRANTS TO Samuel Joyce Cook

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Will the amount of perineal pain perceived by a group of ten primiparas receiving a heat lamp application to the perineum for twenty minutes twice daily during the first three days postpartum be less than the amount of perineal pain perceived by a group of ten primiparas not receiving heat lamp applications?

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other _____

Date 5-30-74

Elinor Hamner RN Notes
Signature of Agency Personnel

Samuel Joyce Cook
Signature of Student

_____
Signature of Faculty Advisor

* Fill out and sign three copies to be distributed as follows: Original-Student; First copy - agency; Second copy - TWU College of Nursing.

GP: GEN 13
12/2/69 GN:fm

BAYLOR COLLEGE OF MEDICINE
TEXAS MEDICAL CENTER
HOUSTON, TEXAS 77025

ND WEBB MADING DEPARTMENT OF SURGERY
(713) 529-4951

May 29, 1974

Samuel Joyce Cook, R. N.
Texas Woman's University, College of Nursing
Houston, Texas 77025

Dear ~~XXX~~ Mrs. Cook :

The Baylor Committee on Research Involving Human Beings is pleased to inform you that your research proposal A Study of the Effects of Perineal Heat Lamp Applications on Patient's Perception of Episiotomy Pain

was approved on May 28, 1974 according to institutional guidelines and provided it receives the unaltered approval of the institutional committee in which it is involved.

1. Continued review will be required
   - ( ) a. After each subject's exposure
   - ( ) b. Quarterly
   - ( ) c. Semi-annually
   - ( ) d. Annually
   - (x) e. Change in Protocol
   - (x) f. Development of unexpected problems or unusual complications
   - (x) g. Other - Upon completion of study

2. Method of Review
   - (x) a. Questionnaire (example enclosed)
   - ( ) b. New Protocol
   - ( ) c. Interview with principal investigator
   - ( ) d. Other

Sincerely yours,

E. Stanley Crawford, M. D.,
Chairman, Committee on Research
Involving Human Beings

ESC:ib

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