



COMPARISON OF DRY CUPPING THERAPY, ACUPRESSURE AND COMBINED ON INTENSITY OF PAIN IN POSTPARTUM FEMALES WITH PERINEAL PAIN – AN EXPERIMENTAL STUDY

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ABSTRACT

INTRODUCTION

Perineal pain is a major morbidity in the first few days after delivery. Cupping therapy is one of the oldest methods of healing. It has been used for thousands of years effectively and was the cornerstone of healing practice in these years. Acupressure, is a skill in traditional medicine using fingers to press the key points on the skin surface to stimulate and induce the natural body self-treat abilities

AIMS AND OBJECTIVES

1. To check effects of Dry cupping therapy versus acupressure and combined on intensity of pain in postpartum females with perineal pain
2. To compare the effect of Dry cupping therapy versus acupressure and combined on intensity of pain in postpartum females with perineal pain

MATERIAL AND METHODOLOGY

The nature of the study was being explained thoroughly to the subjects. Written informed consent was obtained from the subjects prior to the study. Written informed consent was obtained from the subjects prior to the study. Those willing to voluntarily be included in the study. 2 weeks of experimental study with 30 patients in each group (power of study > 80%) with convenience sampling with prior consent in women's hospital, Ahmadabad. All the eligible Participants were divided into 3 different groups: cupping, acupressure and combined group. Study conducted for 2 weeks. Pain McGill questionnaire was taken as outcome at baseline and after 2 weeks.

Results: Analysis was done using SPSS and excel. Levels of significance were kept at 5%. Statistically significant result was found in each group, greater in combined group. Results showed statistically significant improvement in each group (p <0.001*), greater in combined group.

Conclusion: Combined Acupressure and Cupping Is More Effective Than Individual.

Keywords: Cupping, Acupressure, Perineal Pain, McGill Pain Questionnaire

INTRODUCTION

Postpartum pain

Pain relating to pregnancy and childbirth can have a significant impact on women during the postpartum period. Women may experience perineal pain, breast pain, low back pain, pain from uterine involution and incisional pain post caesarean Section¹. Pain is the most common reason for seeking therapeutic alternatives to conventional medicine and the more severe the pain, the more frequent is the use of such therapies frequently used treatments include acupuncture, massage and mind-body therapies². Perineal pain is a major morbidity in the first few days after delivery.²

Postpartum period is distinct in three phases. The third phase is the delayed postpartum period, which can last up to 6 months³. Some changes to the genitourinary system are much longer in resolving, and some may never fully revert to the prepregnant state³.

The pain can reduce mobility, cause discomfort in urination and defecation, has negative effects on breast feeding, interferes with the women's taking care of themselves or their babies, and leads to maternal depression and fatigue⁴. Moreover, perineal pain and long-lasting pain during the puerperium can have long term effects, such as painful intercourse, up to more than 18 months after the delivery⁴. The more intense the pain leads to the higher number of using treatment methods⁴. Whilst pharmacological pain relief may be effective, consideration needs to be given to use in women who may be breastfeeding⁴.

It is therefore essential that effective and safe pain management options and alternatives to mainstream medical treatments are available to women during the postpartum period⁵.

Cupping therapy and Acupressure

Cupping therapy is one of the oldest methods of healing. It has been used for thousands of years effectively and was the cornerstone of healing practice in these years^{7,8}.

Cupping is a physical treatment used by acupuncturists or other therapists, which utilize a glass or bamboo cup to create suction on the skin over a painful area or acupuncture point^{7,8,9}. Acupressure, is a skill in traditional medicine using fingers to press the key points on the skin surface to stimulate and induce the natural body self-treat abilities.

Yazdanpanahi et al did study on the Comparison of the Effects of Dry Cupping and Acupressure at Acupuncture Point (BL23) on the Women with Postpartum Low Back Pain (PLBP) Based on Short Form McGill Pain Questionnaires in Iran: A Randomized Controlled Trial and concluded that the reduction of pain intensity was significant in the cupping therapy group. Therefore, both cupping therapy and acupressure can be effective in reduction of postpartum low back pain in primiparous women¹⁰.

Materials and methodology

An experimental study with Convenience sampling method on 30 females with prior consent in hospital, Ahmadabad. India. Recruited participants were explained the purpose and relevance of the study. The nature of the study was being explained thoroughly to the subjects. Written informed consent was obtained from the subjects prior to the study.

All the subjects fulfilling the inclusion and exclusion criteria were informed. Those willing to voluntarily be included in the study. All the eligible Participants were divided into 3 different groups. After at least 4–8 hr of delivery, cupping intervention was performed.

Cupping therapy

Dry cupping therapy involves stimulation of the skin by suction. In this method, a partial vacuum is produced by heat production within the cupping glass after it is applied to the skin^{10, 11, and 12}. The patients were laid in prone position and cupping was performed as follows: 3–4 glasses with diameters from 75 mm to 120 mm for obese and lean subjects were held inverted over BL23 point. BL23 point or Shenshu was selected for cupping therapy. This point is located 1.5 cun lateral to the posterior midline, on the level of the lower border of the spinous process of the second lumbar vertebra, thereby providing the opportunity for appropriately placing the cups on a flat space. This point has been utilized in treatment of pain syndromes, such as swelling of low back and knees, genital pain, and gynecological disorders including infertility¹³.

A glass cup was utilized to create suction over a painful area. As the air inside of the cups was cooled, vacuums were created, drawing up the skin within each cup. The glasses were removed after 10 to 20 min depending on the color of the circular so-called cupping marks, which range from slightly rose to dark pink. Cupping was performed on alternate days.

Accupressure group¹⁰

On the other group, acupressure was applied for 15–20 min. In acupressure based on clockwise model, the researcher pressed “pressure points- BL 23” with his thumb, in counter-clockwise direction for 5 min. In the second 5 min, pressure was applied for 5 min on the opposite direction. Similarly the pressure continued for 20 min. In fact, this process took about 20 min, twice in the hospital and once after discharge¹⁰.

McGill pain questionnaire¹⁰

The short-form of McGill pain questionnaire was completed in the three study groups before 2 weeks after the intervention. This questionnaire is one of the most reliable pain assessment tools allowing the patients to express their perception of pain using appropriate words. The short-form of McGill pain questionnaire consists of 11 items in the sensory dimension and 4 items in the emotional dimension and the patients have to identify their pain quality through 4 options of none, mild, average, and severe¹⁰.

In the study conducted by Bagheri et al. (2007) on 78 patients who had undergone open surgery of lower extremity fractures at Imam Hossein hospital, Shahrood, Iran, the reliability of this questionnaire was reported as 98%. The reliability and validity of the questionnaire in the study of Bagheri et al. was also the basis for the present study¹⁴

RESULTS

	GROUP A (15 SUBJECTS)	GROUP B (15 SUBJECTS)	GROUP C (15 SUBJECTS)
MEAN SD	35 (10.5)	32 (9.5)	30 (7.5)

Test between		Statistical analysis		
Within group (Pre and Post)		Post hoc bonferoni test		
Between 3 groups		Analysis of variance (ANOVA)		
SMPQ	CUPPING GROUP A	ACCUPRESSURE GROUP B	COMBINED GROUP C	P Value
Baseline	32.5 ± 8.8	29.6 ± 6.1	28.4 ± 7.4	< 0.001*
2 weeks post-intervention	9.6 ± 3.5	12.4±4.5	7.7 ± 3.2	

Discussion

This study aimed to investigate the therapeutic effects of cupping therapy and stimulation of body points by application of pressure on the intensity of postpartum perineal pain.

According to the study results, the mean intensity of postpartum perineal pain in the cupping therapy group, compared to the control group, reduced and the difference was statistically significant ($p=0.01^*$). Greater improvement is seen in combined group compared to other groups. Cupping tgroup has shown greater results than acupressure group.

The results of a study by Emerich et al. (2014) on 12 patients (6 neck pain patients and 6 healthy subjects) indicated that cupping therapy led to increased pressure pain thresholds. This result is compatible with our findings

Few rigorous trials have tested the effects of cupping on pain. The evidence from all RCTs of cupping seems positive. The data suggest effectiveness of cupping compared with conventional treatment Favorable effects were also suggested for wet cupping as an adjunct to conventional drug treatment compared with conventional treatment only¹⁵⁻²¹.

Assuming that cupping was beneficial for the management of pain conditions, its mechanisms of action may be of interest. The postulated modes of actions include the interruption of blood circulation and congestion as well as stopping the inflammatory extravasations (escaping of bodily fluids such as blood) from the tissues. Others have postulated that cupping could affect the autonomic nervous system and help to reduce pain. None of these theories are, however, currently established in a scientific sense^{22,23}, whereas acupressure seems to improve blood circulation but not more than other groups. The study aimed to examine the effectiveness and safety of complementary health approaches identified little evidence that the modalities included in the review are beneficial in reducing postpartum pain²⁴

Conclusion

The findings of the present study showed that postpartum pain reduced in each intervention groups. Combined cupping therapy and acupressure is more effective than separate cupping and acupressure. Although acupressure is less effective but it should be added with cupping for greater results.

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