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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

Effect of Ice Compression on Hand and Sacrum Region in Parturient Women for Reducing Labor Pain

Thesis

Submitted for Partial Fulfillment of Master Degree in Maternity and Gynecological Nursing

By

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List of Abbreviations

Abb.	Full term
ACTH	*Adreno Cortico Tropic Hormone*
BP	*Blood pressure*
BUN	*Blood Urea Nitrogen*
EDD	*Expected Delivery Date*
FHR	*Fetal Heart Rate*
GH	*Growth Hormone*
HB	*Hemoglobin*
HCT	*Hematocrit*
HDL	*High Density Lipoprotein*
HF	*Heart failure*
HHS	*Hyperglycemia Hyperosmolar State*
Hrs	*Hours*
I & O	*Intake and output*
IASP	*International Association for the Study of Pain*
IDDM	*Insulin Dependent Diabetes Mellitus*
IGT	*Impaired Glucose Tolerance*
IV	*Intravenous*
LOC	*Level of consciousness*
LSP	*Left sacrum posterior*
MI	*Myocardial infraction*
NANDA	*North American Nursing Diagnosis Association International*
NGT	*Nasogastric tube*

List of Abbreviations (Cont...)

Abb.	Full term
*NICE, ...	*National Institute for Health and Clinical Excellence*
*NIDDM.....	*Non-Insulin Dependent Diabetes Mellitus*
*No	*Number*
*NPO.....	*Nil Per Os*
*OGTT.....	*Oral Glucose Tolerance Test*
*PP cells	*Pancreatic polypeptide*
*R.....	*Multi correlation coefficients*
*ROA	*Right occipt anterior*
*SD.....	*Sample stander deviation*
*SMBG.....	*Self- monitoring blood glucose*
*TENS.....	*Transcutaneous electrical nerve stimulation*
*TSH	*Thyroid Stimulating Hormone*
*WBC.....	*White Blood Cell*
*WHO	*World Health Organization*
*WKS	*Weeks*
*X.....	*Deviation score*
*X2.....	*Greek chi squared test, to test the difference in proportions in two or more independent groups*

Abstract

Aim of the study to evaluate effect of ice compression on hand and sacrum region in parturient women for reducing labor pain. **Study design:** Quasi Experimental design was used to conduct this study **Sample size:** One hundred and fifty (150)devided into three groups, 50 hand group, 50 sacrum group and 50 for control group of parturient women were included within 4 months **setting:** in labor and delivery unit at the ElGlaa Maternity Hospital Tools of data collection: consisted of **3 tools I**: A Self-Structured Interviewing Questionnaire Sheet, **II**: Labor Progress Record (partograph), **III**: Modified version of visual analogue scale, APGAR scoreand women satisfaction questionair. **The Results** of this study revealed that, ice compression on hand group had more persistent effects on pain reduction with, mean pain score was (8.87±0.77), cervical dilatation progress with mean score of (6.45±.56), uterine contraction frequency with mean score of(3.87±0.33)and uterine contraction intervals with mean score of(3.40 ±.77) than ice compression on sacrum group. Parturient Women with ice compression on hand groups were more satisfied than sacrum group. **Conclusion** in relation to total mean pain score there was highly statical significant difference between studied groups and control groupalso there was highly statical improvement in labor progress among studied groupes compared with controle group **Recommendation:** Conduct education programme for the pregnant women during antenatal period about cold compression to reduce labour pain.

Key words: labour, pain management, cold compression.

INTRODUCTION

Childbirth is one of the most painful events for women during their lifetime. Labor pain is due to the stimulation of nerve receptors, followed by uterine muscle contractions, and is felt in the lumbosacral, hip, and gut areas. The pain can be severe, prolonged and it might lead to confusion and loss of confidence among women. Labor pain causes an increase in epinephrine and norepinephrine levels, which increases the blood pressure, heart rate, and oxygen consumption in women. In addition, vasoconstriction induced by catecholamine leads to a decrease in uterine blood flow, which directly increases the prevalence of dystocia and decreases the neonatal Apgar score ***(Fahimeh et al., 2017).***

Labor pain is the most acute pain of a human body. It is similar to other types of visceral pain (severe, colicky, and intermittent). In contrast to many other sources of pain, is not a pathological case, but a part of a normal physiological process. In the first stage of birth, it is caused by uterine contractions and dilatation of cervix to allow the exit of the fetus. In the second stage of labor, the pain is caused by the pressure of the pelvic and the distension of enclosing structures ***(Santana et al., 2020).***

The most important goal of labor pain is to mobilize a woman's body to cooperate during delivery. Unfortunately, the perception of labor pain as bad pain can cause a lot of problems, for example: it increases maternal catecholamine secretion which contributes to emotional stress and in consequence has a negative influence on women's mental health. The labor pain is a dominant problem for many pregnant women and it urges them to use the pain management techniques during labor ***(Klomp et al., 2016).***

Management of labor pain can be divided into two categories: pharmacological and non-pharmacological. Pharmacological measures include the administration of analgesic drugs and regional anesthesia, but these measures have side effects on the mother, such as decrease in heart rate, hypotension, and vertigo, and adverse effects on the fetus that can cause respiratory suppression and diminish the suckling reflex early after birth ***(National Institute for Health and Clinical Excellence (NICE), 2018)***.

In contrast, non-pharmacological pain measures such as cold compression, cryotherapy, aromatherapy, and acupressure are examples of non-pharmacological methods that not only relieve pain but also relieve fear, anxiety, and drug requirement. In addition, non-pharmacological methods for