

Awareness of Therapeutic Positions in Women During Pregnancy Related Lumbar and Pelvic Pain

Ashwini Pawar¹, Chandrakant Patil²

¹Final year student, Faculty of Physiotherapy, KIMS "Deemed To Be University" Karad, Maharashtra, India,

²Associate Professor, Department Cardiopulmonary Physiotherapy, Faculty of Physiotherapy, KIMS "Deemed To Be University" Karad, Maharashtra, India

Abstract

Objectives- Pregnancy related lumbar and pelvic pain is very common. This pain is mainly because of hormonal and postural changes occur during pregnancy. Lumbar and pelvic pain is the most common cause of discomfort experienced by pregnant women during pregnancy. so, Awareness about therapeutic positions to reduce that pain is very necessary. Some ergonomic positions given to the women which can help to improve posture and decrease discomfort and also relieving pain. It will give more comfort to the patient for day to day activities during pregnancy. Hence, this study aims to aware the pregnant women about therapeutic positions , that decrease the lumbar and pelvic pain and discomfort.

This study was conducted to find out the awareness of therapeutic positions in the pregnant women about lumbar and pelvic pain.

Methodology- The study group consisted of 64 women. . Females with age group of 25 to 35yrs. A prevalence study was conducted among females of all three trimesters of pregnancy. Females were selected on the basis of inclusion and exclusion criteria. They were assessed by performing visual analog rating scale and questionnaire was used to evaluate any physical disability contribute to lumbar and pelvic pain.. The data was collected and analysed accordingly.

Result- Data from sixty four females were obtained and analysed. Most of women were not aware about therapeutic positions ,only few were aware about therapeutic positions who was well educated. So 33% were aware and 67% were not aware about those positions. Following were some preferred therapeutic positions : 87% of women preferred side lying .8% preferred Quarter turn from prone, 3% preferred Sitting leaning forward, 2% preferred Sitting astride a chair.

Conclusion- We found out that there is awareness about therapeutic position and there effects is not seen in all women during pregnancy in Krishna hospital , Karad.

Keywords- lumbar and pelvic pain ,Therapeutic positions, Pregnant women

Introduction

Pregnancy related low back or pelvic pain has been recognized as a medical entity since mentioned in the

Corresponding Author:

Dr.Chandrakant Patil .

Associate Professor, Department Cardiopulmonary Physiotherapy, Faculty of Physiotherapy, KIMS "Deemed To Be University" Karad, Maharashtra, India. Pin -415110. Phone number-9561703473
Email ID- chandupatil69@gmail.com

4th century BC.¹ The majority of the studies reports that back pain experience in women during a pregnancy that cause substantial impact on their daily lives.⁽²⁻⁵⁾ There are common physical changes associated with pregnancy ;those are ligamentous laxity, weight gain and hyperlordosis.¹ common musculoskeletal complaints of pregnancy women are low back pain and pelvic pain.^(1,2)

Lumbar pain commonly presents as same as back pain experienced before pregnancy. Lumbar pain is located over and around lumbar spine with or without

radiation to leg or foot. Its functional limitations are prolonged weight bearing in standing or sitting and repetitive lifting. lumbar pain may resemble episodes of low back pain experienced before pregnancy. Erector spinae muscles may be tender on palpation.^(2,7,8)

Pelvic pain approximately four times more prevalently seen than lumbar pain during pregnancy.⁹ Pelvic pain located in buttocks and low back, distal and lateral to the lumbar spine, may radiate to posterolateral thigh, occasionally to knee and rarely to calf. Functional limitation for this pain are turning in bad, climbing stairs, running, walking, lifting and twisting. this pain has been particularly associated with work involving lifting with twisting. it aggravates by jarring activities. Pelvic pain risk increased with work postures involving flexion of the upper part of body.^(2,8-9,10-12) The 50-90% of women will experience some type of back pain during their pregnancy. In fact, recent research has shown that the severity of back pain and that pain of pregnancy may impact the entirety of some women's lives.⁽²⁻⁶⁾

It was found that 75% of women will have posterior posture at the end of pregnancy and suggested that an anterior posture associated with pubic symphysis problems. women gain weight during pregnancy and some postural changes also seen in women to maintain balance because of their center of gravity shifts.¹³

Generally some women use some general position for their comfort and decreasing strain on pelvic. Therapeutic positions helps to manage pain and prevent further complications at any stage of pregnancy, such as 1) Sitting leaning forward position in which patient sits on chair with knees apart, hands and upper body supported on raised table or plinth, back should be straight. 2) sitting astride a chair position in this patient sits astride in a chair in forward leaning position with back straight. 3) Patient in side lying position with pillows kept between two flexed knees. 4) Quarter turn from prone position in this position patient lies slightly prone position with flexed upper hip and knee, the lower arm should keep behind the trunk.¹ So every pregnant women should know these positions to avoid pain and further complications.

Therefore, the aim of study was to create awareness among four different therapeutic positions in pregnant women about lumbar and pelvic pain and which position is more preferred in pregnancy.

Methodology

Total 64 females were selected from Krishna Hospital, Karad, for the study who fulfilled inclusion criteria. The procedure was explained and consent was taken from those willing to participate.

Here, visual analog rating scale and questionnaire was used to evaluate any physical disability contribute to lumbar and pelvic pain performed. so these were performed to rule out the presence or absence of pregnancy related lumbar and pelvic pain. The data were collected and statistical analysis was done.

Result

1) Distribution of Awareness About Therapeutic Positions:

	Frequency	%
YES(A)	21	33
NO(B)	43	67

Interpretation- Above table represents awareness about therapeutic positions in subjects. Out of 64 subjects, 22 subjects aware and 43 subjects not aware. so awareness about therapeutic positions is 33% and 67% not aware about that.

2) Distribution of Preference of Therapeutic Positions:

	Frequency	%
SL(A)	56	87
QTFP(B)	5	8
SLF(C)	2	3
SAC(D)	1	2

Interpretation- Above table represents preference of therapeutic positions in subjects. Out of 64 subjects. Side lying preferred by 56 subjects(87%), Quarter turn from prone preferred by 5 subjects(8%), Sitting leaning forward preferred by 2 subjects(3%), Sitting astride a chair preferred by 1 subject(2%)

3) DISTRIBUTION OF TRIMESTERWISE:

	Frequency	%
1st T(A)	0	0
2nd(B)	52	82
3rd(C)	12	18

Interpretation- Above table represents trimesterwise pain in subjects. Out of 64 subjects ,0 subjects (0)% had pain in first trimester,52 subjects (82%) had pain in second trimester and 12 subjects (18%)had pain third trimester.

4) DISTRIBUTION OF Visual Analog Scale:

	Frequency	%
0-5cm(A)	8	13
6-10cm(B)	56	87

Interpretation- Above table represents results of visual analog rating scale in subjects. Out of 64 subjects. 8 subjects(13%)had pain in between 0-5cm and 56 subjects (87%)had pain in between 6-10cm.

Discussion

The purpose of the study is to study the awareness of therapeutic positions can be adopted by pregnant women during pregnancy and that impact on the lumbar and pelvic pain. The objective of this study to find awareness of therapeutic positions in the pregnant women about lumbar and pelvic pain.

The study was carried out and result was drawn by using visual analog scale and with the help of questionnaire.

This project was done in six months of duration with sample size 64 and age group of 25-35 years. Then baseline information of age(yrs),weight(kg),and height(cm) along with details regarding the current pregnancy were taken. This participants were selected according to the inclusion and exclusion criteria. This study was conducted in Krishna hospital, karad. Consent form was taken from the subjects and assent form was taken by their caretakers. Visual analog scale and lumbar and pelvic pain questionnaire were performed to rule out

the presence or absence of lumbar and pelvic pain.

The procedure was carried according to visual analog rating scale and lumbar and pelvic pain questionnaire. Then the intensity of the pain was seen by using visual analog rating scale in which ,we had asked patient to mark over 10cm line according to their pain intensity, that is at rest and on activity.

And also questionnaire was used to evaluate any physical disability contribute to lumbar and pelvic pain.

According to a article, it is said that there are lumbar and pelvic pain present in females .so some therapeutic helps that pain decrease and make pregnant women comfortable. so following positions are:

1) Side lying: participant in side lying with bilateral hip and knee flexion seperated by a pillow placed between the knees.

2) Quarter turn from prone :participant lies as far into prone as possible with the upper knee and hip flexed and lower leg straight. The lower arm should be behind the trunk in this position

3) Sitting leaning forward: participant sits with knees apart and upper body supported with arms on a raised table or plinth, keeping the back straight.

4) Sitting astride a chair: participant sits astride a chair in a leaning forward position while supporting the upper body on the back of the chair, and keeping the back straight.

Each of this position was explained to the participant and made them aware about effects of that therapeutic positions. And them about these positions

In age group,72%women in between 25-30yrs and 28%women in between 31-35yrs. In BMI ,88%women were normal category ,9% had were overweight ,3% were obese. most of the women in normal category and some in overweight. 53% women had full term normal pregnancy is type of previous pregnancy. 40% had lower segmental cesarean section. 7% women were primigravida. Usually in all cases back pain is commonly seen. 14%women had lumbar and 12% had pelvic girdle ; 74%women had both. Pain is present at lower back as well as lumbar area also. And in all women aching type of pain was seen.

Excessive pain usually seen second trimester. so,82%women had pain in second trimester.18% had in third trimester.67% had Activity limitations in prolonged standing and 33% had in prolonged bending. Most of women were not aware about therapeutic positions ,only few were aware about therapeutic positions who was well educated. So 33% were aware about that and 67% were not aware about those positions.from some preferred therapeutic positions, 87% of women preferred side lying .8% preferred Quarter turn from prone, 3% preferred Sitting leaning forward, 2% preferred Sitting astride a chair.

Conclusion

On the basis of result of study, it was concluded that there is lumbar and pelvic pain present in all pregnant women .But awareness about therapeutic position and there effects is not seen in all within age group of 25 to 35yrs. Pregnant women mostly preferred side lying position, but not aware about therapeutic positions. In pregnancy usually aching pain is seen. Mainly most of the women had low back pain and some had pelvic girdle pain and few had both pain. In most of women started low back pain in 2nd trimester. Side lying position is mostly prefer to relieve your lumbar and pelvic pain

Awareness about therapeutic positions in pregnant women is 33% and 67% women are not aware about those positions.

Conflicts of Interest: There were no conflicts of interest in this study.

Ethical Clearance: Ethical clearance was taken from institutional committee of Krishna institute of medical sciences.

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References

1. Ashby JF,Johnson GM . The therapeutic positional preferences of pregnant women. barrington physiotherapy clinic, school of Physiotherapy, university of Otago,New Zealand.(2015) ;43(3):86-92.
2. Perkins J, Hammer RL, Loubert PV. Identification and management of pregnancy-related low back pain. Journal of nurse-midwifery. 1998 Sep 1;43(5):331-40.
3. Kristiansson P, Svaˆrdsudd K, von Schoultz B. Back pain during pregnancy: a prospective study. Spine 1996;21:702–09
4. Mantle J. Back pain in the childbearing year. In: Boyling JD, Palastanga N, editors. Grieve’s modern manual therapy, 2nd ed. London: Churchill Livingstone, 1994:779–808
5. Mantle MJ, Greenwood RM, Currey HLF. Backache in pregnancy. Rheumatol Rehab 1977;16:95–101.
6. Oˆstgaard HC, Anderson GBJ, Karlson K. Prevalence of back pain in pregnancy. Spine 1991;16:549–52.
7. Berg G, Hammar M, Moˆller-Neilsen J, Lindeˆn U, Thorbald J. Low back pain during pregnancy. Obstet Gynecol 1988;71:71–5
8. Oˆstgaard HC. Assessment and treatment of low back pain in working pregnant women. Semin Perinatol 1996;21:61–9.
9. Colliton J. Back pain and pregnancy. Active management strategies. Physician Sports Med 1996;24:89–93.
10. Oˆstgaard HC, Zetherstroˆm G, Roos-Hansson E. Reduction of back and posterior pelvic pain in pregnancy. Spine 1994;19:894– 900.
11. Oˆstgaard HC, Roos-Hansson E, Zetherstroˆm G. Regression of back and posterior pelvic pain after pregnancy. Spine 1996;21:2777– 80.
12. LaBan MM, Rapp NS. Low back pain of pregnancy. Phys Med Rehabil Clin N Am 1996;7:473–86.
13. Sandler SE. The management of low back pain in pregnancy. Manual Ther 1996;1:178–85.