

ASSESSMENT OF CHRONIC LOW BACK PAIN AFTER CESAREAN SECTION IN HOSPITALS OF LAHORE

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ABSTRACT

Objectives: To find out the frequency of chronic low back pain after cesarean section. **Study Design:** Cross-sectional study. **Period:** Six months (Sep: 2016-Feb 2017). **Setting:** Jinnah hospital Lahore, Akhtar Mubarak Trust hospital Lahore and Nawaz Sharif Social Security Hospital Lahore. **Material and Methods:** The sample size of 160 women who had cesarean section, data collected. Likert scale of Oswestry low back pain disability scale used to measure the intensity of low back pain. Statistical analysis done via IBM SPSS 21.0. **Results:** Respondent rate is 100%, the mean age of patients is 27.93 ± 4.3 whereas the minimum age is 20 years and maximum is 40 years. 160 respondents were asked to fill the questionnaire, among them 46.9% (75) had no hypertension and 53.1% (85) had hypertension. The frequency of females having diabetes was 77.5% (124) had no diabetes and 22.5% (36) had diabetes. 114(71.3%) had no low back pain, 46(28.8%) had moderate low back pain and none has severe pain after their Cesarean Section. **Conclusion:** It is concluded that frequency of chronic low back pain after C-section is little bit present after the surgical intervention of cesarean Section. It can be claimed that C-section is one risk factor of chronic low back pain.

Key words: Backache, Cesarean Section, Pregnancy, Disability

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INTRODUCTION

Cesarean Section (CS) is an invasive intervention which is being conducted in emergency case to save the lives of mother and child when natural delivery is impossible or dangerous for mother and child.¹ Unplanned Cesarean Section is done in obstetrical and gynecological department to cut down the problems during childbirth, in rare cases it leads to complications. Wound infection is one of them. Surgical site infection increases the morbidity and mortality rate.² Different surgeries cause persistent pain. Prevalence of pain after Cesarean Section is 12%. Ache may be at lower back area and incision site leads to activity limitations.³ Afterward surgical intervention, chronic low backache persists higher.⁴

Pain in lower back area is very conjoint disease affecting the whole body. Backache score is varying persons to person like tingling, sensation, throbbing, cutting like sensations. Current evidence shows that chronic pain after cesarean delivery, ranging from 1 and 18%.⁵ Chronic post-surgical pain has constant or intermittent pain lasting for more than 3 months after surgery.⁵ Generally woman desires Cesarean Section because they perceive that it is easier than normal delivery.⁶ Increase rate of cesarean deliveries give rise to mental issues, physical issues and disabilities.⁷ Researchers have found that chronic low back pain occurred after delivery more frequently in who undergo through anesthesia before cesarean section rather than who did not

receive⁸ Severe postsurgical pain has been experienced after anesthesia.⁹ Urinary incontinence mostly present in females after childbirth.¹⁰ Weight gain is a factor of it, which increases causes sacroiliac pain, muscular pain, joint instability and increase lumber curve.¹¹ Low back pain after the childbirth is quite different from pelvic girdle pain.¹² Women are facing back and pelvic girdle pain causes difficulties in routine such as personal care, prolong sitting, traveling, lifting and carry weights.¹² Post cesarean low back pain is rarely seen because referral for low back pain after cesarean section to clinics very low.^{13,14}

OBJECTIVE

To determine the frequency of chronic low back pain after Cesarean Section

MATERIAL AND METHODS

Cross sectional study of six months conducted during (Sep: 2016-Feb 2017), Non probability convenient sampling with sample size 160 measured on Prevalence rate 0.18. Data collected from Jinnah hospital Lahore, Akhtar Mubarak Trust hospital Lahore and Nawaz Sharif Social Security Hospital Lahore. Females presented with low back pain between 3-8 months of cesarean section were included in the study and having Disc bulge, neurological problem were excluded. Oswestry low back pain and disability questionnaire used. This scale is used to measure pain intensity. Numeric rating scale ranges 10-100, 10-30 shows no pain, 30-60 moderate pain and 61-100 for severe pain.²⁶ Basic instruction and information were given to participants. Permission was taken from authorities of institutes and university committee and then survey was conducted.

RESULT

Age		
Mean	SD	Range
27.93	4.306	20-40
N=160		

Respondent rate is 100%, the mean age of patients was 27.93±4.3 whereas the minimum age is 20 years and maximum was 40 years [Table I].

History of Hypertension		
Hypertension	Frequency	Percent
No	75	46.9
Yes	85	53.1
N=160		

Total 160 persons were asked to fill the questionnaire among them 46.9% (75) had no hypertension and 53.1% (85) had hypertension [Table II].

Diabetes History		
Diabetes	Frequency	Percent
No	124	77.5
Yes	36	22.5
N=160		

The frequency of females having diabetes was 77.5% (124) had no diabetes and 22.5% (36) had diabetes [Table III].

History of Heart Disease		
Heart disease	Frequency	Percent
No	148	92.5
Yes	12	7.5
N=160		

The question was asked about having heart disease 92.5% (148) said no and 7.5% (12) said yes. [Table IV].

Rating of Oswestry low back pain and disability questionnaire		
Numeric Rating Scale	Frequency	Percent
0	53	33.1
1	6	3.8
2	11	6.9
3	16	10.0
4	11	6.9
5	8	5.0
6	18	11.2
7	16	10.0
8	8	5.0
9	10	6.2
10	3	1.9
N=160		

The frequency of females having cesarean section was 100% (160) .The frequency of females

having chronic low back pain 33.1% (53) said no and 66.9%, (107) said yes. The question was asked about numeric rating scale of pain 33.1%(0), 3.8%(1), 6.9% (2, 4), 5.0%(5), 11.2% (6), 10.0% (3, 7), 5.0%(8), 6.2%(9), 1.9%(10). [Table V].

Levels of pain			
Levels of Oswestry low back pain disability scale		Frequency	Percent
No pain	Score 10-30	114	71.3
Moderate pain	Score 31-60	46	28.8
Severe pain	Score 61-100	0	0
N = 160			

The question was asked about pain intensity 36.9% (having no pain), 19.4% (lit bit pain), 16.2% (level of pain was moderate), 16.2 % (feeling of pain for patient is severe), 10.6%, (no. of these patients feeling severe pain) and .6% (worst pain patients can't tolerate this). The question was asked about the ability to take personal care 39.4% (having no pain), 26.9% (can perform activities with some pain), 12.5% (perform activities gradual), 11.2% (no. of these patients need assistance), 8.8% (need help some time), 1.2% (cannot perform). The question was asked about the ability to lift objects 30.0% (no discomfort), 26.9% (feel some pain), 18.1%. (Only specific object), 11.9% (only specific object with specific weight), 8.1% (just few objects), 5.0% (cannot perform). The frequency of the ability to sit 36.9% (without pain), 21.2% (little pain), 18.1% (more than 60 minutes), 10.6% (restricts half hour), 8.1% (just for few minutes), 5.0% (no. of participants restricted to sit).

The frequency of the ability to stand 35.6% (no pain) 23.1%, (little bit pain), 16.9%, (Pain limits standing more than 60 minutes), 8.8% (restricts more than half hour), 11.2% (just 10 minutes),4.4% (cannot stand). The question was asked about the ability to sleep 38.1% (no disturbance), 22.5% (sometimes disturbed),11.2%, (sleep <6hours), 15.0%, (sleep <4), 7.5% (less than 120 minutes),5.6 (restricts from sleeping). The frequency of the recreational activities 45.0% (no pain), 22.5% (with some pain), 10.6 % (can perform some action but not all), 10.0%, (very hard to perform), 3.1%

(cannot do any action).

The patients numeric rating scale score 0, in which 98.1% (no feel pain), 1.9% (mild). Pain score 1 had 50.0% (no ache), 50% (very mild). Pain score 2 had 18.2% (no pain), 72.7% (very mild), 9.1 (fairly severe).pain score 3 had 6.2(no pain), 62.5 (very mild), 31.2% (moderate). Pain score 4 had 9.1% (no pain), 45.5% (very mild), 45.5% (pain is moderate). Pain score 5 had 12.5% (very mild), 62.5% (moderate at that time), 12.5% (fairly severe and severe). Pain score 6 had 5.6% (very mild), 50.0% (moderate), 44.4% (fairly severe). Pain score 7 had 12.5% (very mild), 6.2% (moderate), 56.2% (fairly severe), 25.0% (severe at the moment). Pain score 8 had 50.0% (fairly severe), 50.0% (very severe). Pain score 9 had 10.0% (moderate at the moment), 20.0% (fairly severe) 70.0% (very severe). Pain sore 10 had 33.3% (fairly severe 33.3% (very severe) 33.3% (worst).

The patients having normal social life pain intensity 54.8% (mild), 57.7% (moderate), 11.5% (fairly severe). Patient with limited energetic interest had pain intensity 3.2% (mild), 23.1% (moderate), 17.6% (very severe). Patient with restricted social life had pain intensity 6.5% (mild) 57.7% (fairly severe), 17.6% (very severe). Patient with social life restricted to home had pain intensity 3.8% (moderate) 58.8% (very severe). Patient with no social life at all had pain intensity 5.9% (very severe). Patient with mild pain intensity can travel 5.5% (without any pain), 40.0% (traveling gives extra pain). 31.6% (can manage travel for few hours), patients with moderate pain had 3.6% (no pain by traveling) 30.0% (traveling gives extra pain) 31.6% (can manage journey for 2 hours). 12 .5 % (pain restricts from traveling even less than 60 minutes).The patients with more pain 12.0%, 21.1% (can travel for 120 minutes), 81.2% (limits to travel even for less than 1 hour) 30.0% (pain restricts to travel even for less than 30 min).

The patient with very severe pain 15.8% (can only travel for two hrs.), 6.2% (limits to travel even for <1), 60.0% (limits to travel even for less than half hour), 70.0% (cannot travel). From the tabulated data of the levels of lower backache (Table VI) the 114(71.3%) had no low back pain, 46(28.8%) had

moderate low back pain and none has severe pain after their Cesarean Section

DISCUSSION

In this study patients complained low back pain after cesarean section. In a previous study, 639 women were taken who complained chronic low back pain and pelvic girdle pain among them 176 filled questionnaires; 34 reported remission of pain and 115 patients reported severe pain. Pain continuously irritate and cause functional limitations 3-14 months after Cesarean Section, this reveal the functional disability caused by low backache.¹² In the present study 97 patients out of 160 cannot perform their functional activities. Pain intensity increases with functional work. A study reported that cesarean delivery causes more back pain and pelvic pain than vaginal delivery. Pain may persist for many months and leads to functional limitations.

In final results 33% women reported severe back pain. In current study 101 patients out of 160 having pain after 3 months of cesarean section. One more study reported pain was persistent in 10 patients out of 16 at the time of assessment. Every five patients out of nine reported chronic backache which persist every time cause may be neuropathic. The primary goal of this survey was to observe level of pain. The second one was that this pain how much affect the quality of life and further health issues.¹⁶ In present study 63.1% patients out of 160 patients reported back pain in sitting and 64.4% having pain in standing.

In this study chronic back pain was find out in different groups; after cesarean delivery (12%), planned cesarean section (8%), vaginally delivery (66%) respectively. Determination of this review to find the treatment of persistent low back pain. Most of females use pain killers to resolve the pain.¹⁵ In present study 101 females having chronic low back pain but most of them use pain killer tablets or injections to relieve pain. One more study had surprising results of low back pain which include Australian and United States studies.

Patients was on 1 year follow up; pain after 3

months (33%) and pain persistent after 12 months (71%). This systemic study was conducted to inspect the course of pain and return the patients to their daily routine activities.²⁸ In current study a pool of 160 patients taken in which 88 patients complained pain when return to recreational activities after 3-6 months of cesarean section. This study was conducted in Netherland to find the frequency of persistent low back after delivery and to evaluate possible risk factors. During a cesarean delivery, tissue damage is related to the skin incision, more stress on incision, lower part of the uterus and abdominal muscles and nerves. 7.3% women complain low back pain (numeric rating scale =4.5).¹⁷ In present study the data of moderate low back pain is lower than having no low back pain and luckily, one respondent among them who has severe pain after their surgical intervention.

CONCLUSION

In this study, the frequency of chronic low back pain after cesarean section found in moderate condition. The complaint of pain may also be due to failure in personal car, it causes discomfort too. In case of carrying huge weights, it gives more pain. Pain restricts walking, standing, sleeping, sitting and traveling etc.




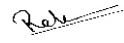
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AUTHORSHIP AND CONTRIBUTION DECLARATION

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