

A Descriptive Study On Impact Of Spinal Cord Injury On Menstruation Anit Catherine Charls¹, Kurian Zachariah², Nidhi Rawat³ St. Johns Medical College, Bangalore, India



Introduction

- Spinal cord injury results in alterations in sexual functioning especially in relation to female sexuality, menstruation, pregnancy, labor and delivery.
- Spinal cord injury has long been noted to result in alterations in the menstrual cycle, though limited reports have studied this phenomenon.

Objectives

- To study the prevalence of menstrual changes following spinal cord injury.
- To determine association between spinal cord injury and menstrual changes.
- To determine association between type of injury (complete /incomplete) and menstrual changes
- To determine association of traumatic and non-traumatic spinal cord injury with menstrual changes.

Methodology

- Forty females who sustained spinal cord injury after attaining menarche with regular menstrual cycle prior to spinal cord injury and willing to participate in the study with informed consent were included in the study.
- Spinal cord injured females with history of irregular menstrual cycle prior to injury were excluded from the study.
- A questionnaire was used to know about the onset of menstruation after injury, its regularity, frequency, duration, menstrual flow, dysmenorrhea and presence of autonomic dysreflexia.

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Results						
Variables		(n=40)				
Age(years)		30.88 (mean)				
Paraplegia		31				
Tetraplegia		9				
Traumatic SCI		18				
Non Traumatic SCI		22				
AIS A		22				
AIS B		4				
AIS C		8				
AIS D		6				
Level of Injury	No. of subjects with transient amenorrhea					
(n=40)	Ye	s	NO			
C1-C7	8		1			
T1-T6	9		0			
T7-T12	11		7			
LI & Below	3		1			
Mean duration of transient amenorrhea (in months)						

Complete SCI		2.1			
Incomplete SCI		2.7			
Traumatic SCI		2.3			
Non traumatic SCI		2.9			
Menstrual characteristics	Pre-injury		Post-injury		
Duration of menstrual cycle(days)	28.9 (mean)		28.6(mean)		
No. of menstrual bleeding days	4.8 (mean)		4.2(mean)		
Menstrual flow	M	oderate-36/	Moderate-30/ Mild-		
moderate/mild(n=40)		Mild-4	10		
Dysmenorrhea (number of individuals)		13	27		
Autonomic Dysreflexia		0	3		
during					
menstruation(number of					
individuals)					

Discussion

- 31 (77.5%) among 40 females had amenorrhea after the injury. Comarr AE¹(1966) et al, conducted a study in 25 female SCI patients, where 50 % of subjects reported temporary amenorrhea.
- Suzanne J. Axel²(1982) et al, reported temporary amenorrhea in 58% subjects
- No significant relationship was noted on comparison of complete versus incomplete SCI and traumatic versus nontraumatic SCI in our study
- Comarr et al¹. found that majority of the women resumed their cycles within 6 months of SCI and it was independent of the nature of the injury.
- Comarr et al¹ concluded that women nearing menopause may become amenorrhoeic after spinal cord injury.
- Contrary to this, all 11 patients in the 40-45year age group had resumed menses after a period of amenorrhea in our study.
- Significant reduction(P value of 0.0412) in menstrual flow post SCI was reported in our study.
- Contrary results were reported by *Roopsingh*³ et al, who found significant change in regularity, duration and intensity of menstrual flow

Conclusion

- Multi disciplinary assessment of sexual issues in women with SCI is of prime importance.
- There is a need to address all the psycho-sexual problems of women with SCI so as to enable them to reclaim their socio-cultural life.

References

1. Comarr AE. Observations on menstruation and pregnancy among female spinal cord injury patients. Paraplegia. 1966 2. Axel SJ. Spinal cord injured women's concerns: menstruation and pregnancy. Rehabil Nurs Off Assoc Rehabil Nurses. 1982 Oct 3. Singh R, Sharma SC. Sexuality and women with spinal cord injury. Sex Disabil. 2005;23(1):21–33.