

FEMALE SEXUAL DYSFUNCTION AFTER SPINAL CORD INJURY: AN IMPORTANT FACTOR ASSOCIATED TO LIFE DISSATISFACTION

Hypothesis / aims of study

Sexual function is tremendously affected by spinal cord injury (SCI) in both men and women. (1, 2) Sexuality is identified as a very important aspect of life, and restoration of sexual function may have a significant impact in the rehabilitation process and may improve quality of life. Because women are less commonly affected by SCI and also considering the fact that female sexuality has generally been given less attention, sexuality of SCI women remains poorly known. (3)

In the present study, we aimed to investigate issues related to sexual function in SCI women.

Study design, materials and methods

A consecutive series of 53 women with SCI (> 12 months) were prospectively evaluated. Demographic characteristics were evaluated, including age, duration of SCI, marital status, American Spinal Injury Association (ASIA) impairment and SCI level.

All subjects completed a structured questionnaire including a detailed sexual anamnesis regarding frequency and modalities of sexual intercourses, orgasmic function and satisfaction with sexual life (0=dissatisfied and 10=satisfied). Also, the Functional Independence Measure (FIM) and the Life Satisfaction Questionnaire-9 (LiSat-9) were applied in all subjects. Comparisons between sexually active and sexually inactive subjects after the SCI were performed, in order to investigate predictors of sexual activity in women after SCI.

The Student t test was used to compare continuous variables, while categorical variables were compared using the Fisher's exact test. All tests were 2-sided with $p < 0.05$ considered statistically significant. Data were processed using commercially available statistical software (GraphPad Prism, version 6.02 for Windows, San Diego California USA).

Results

Mean age was 37.3 ± 14.5 years and median time from SCI was 3.4 (2.0 -8.6) years. Twenty-one subjects (39.6%) were married, 21 (39.6%) were single and 11 (20.7%) were divorced. The American Spinal Injury Association (ASIA) impairment scale was A in 41 (77.3%), B in 5 (9.4%), C in 3 (5.6%) and D in 4 (7.5%). The level of SCI was cervical in 19 (35.8%) patients, thoracic in 28 (52.3%), lumbar in 5 (9.4%) and sacral in one (1.8%) patient.

Before SCI, 28 (52.8%) women had a frequency of > 4 monthly sexual intercourses, 8 (15.1%) had 1 to 4/month and 17 (32.1%) were sexually inactive. After SCI, only 5 (9.4%) had > 4 monthly sexual intercourses, 12 (22.6%) had 1 to 4/month and 36 (67.9%) were sexually inactive. Before SCI, 38 (71.7%) patients claimed to achieve orgasm in more than half of the sexual intercourses as opposed to 17 (32.0%) patients after SCI ($p < 0.0001$). The mean subjective satisfaction with sexual life decreased from 6.7 ± 3.7 before SCI to 3.4 ± 3.6 after SCI ($p < 0.0001$). Comparisons between sexually active and inactive women are shown in Table 1.

Table 1 – Comparisons between sexually active and sexually inactive women after SCI

	Sexually active (n=17)	Sexually inactive (n=36)	P Value	Odds Ratio
Age (years)	33.2 ± 13.9	39.4 ± 14.6	0.138	
Incomplete SCI (ASIA B,C,D)	7 (41.1%)	5 (13.8%)	0.038	4.34 [1.12-16.76]
SCI level			0.533	
Cervical	5 (29.4%)	14 (38.8%)		
Thoracic	10 (58.9%)	18 (50%)		
Lumbar/sacral	2 (11.7%)	4 (11.2%)		
Duration of SCI (years)	$5.6 [1.8-11.2]$	$3.2 [2.0-7.2]$	0.81	
FIM*	109 (91-123)	98 (71-108)	0.065	
Marital status (married)	10 (58.9%)	10 (27.7%)	0.038	3.71 [1.1-12.4]
Urinary continence	9 (52.9%)	15 (41.6%)	0.557	
LiSat-9 °	39 (31-47)	31 (24-38)	0.008	

* Functional independence measure

° Life Satisfaction Questionnaire-9

Interpretation of results

We have shown an impressive negative impact of SCI in female sexual life, with a marked reduction of sexually active women, as well as significant decrease in the frequency of sexual intercourses and in the ability to achieve orgasm. In addition, satisfaction with sexual life was significantly reduced after the SCI.

Sexually inactive women, had a higher rate of complete SCI lesion (ASIA A) and were less frequently married. Moreover, general quality of life, measured by the validated questionnaire LiSat-9, was significantly reduced among sexually inactive women. Despite not significant, sexually active women tend to be younger and have superior functional independence. Other parameters such as level of SCI, duration of SCI and prevalence of urinary incontinence did not differ between groups.

Concluding message

In most spinal cord injured women, sexual function is severely affected, leading to a negative impact in life satisfaction. Factors that appear to be associated with a higher chance of being sexually active include incomplete neurological lesions, married marital status, younger age and good functional independence.

References

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Disclosures

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