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IMPACT OF URINARY INCONTINENCE ON MALE SEXUAL FUNCTION AFTER SPINAL CORD INJURY

Hypothesis / aims of study

Sexual function is tremendously affected by spinal cord injury (SCI).(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. After spinal cord injury (SCI), sexuality may be affected by physiological, psychological and emotional consequences. Genital organs' functions may be damaged depending on the level and completeness of the neurological injury. Furthermore, the impaired ability to maintain continence after SCI puts individuals at risk of presenting urinary leakage during typical daily activities, such as sexual intercourse, impairing the willingness to engage in sexual activity. In this study we sought to investigate sexual function and satisfaction in men with SCI, and the impact of urinary incontinence.

Study design, materials and methods

We prospectively evaluated 295 men with traumatic SCI (>12 months) with a mean age of 40.8 ± 14.4 years. Median time from SCI was 3.6 years [1.7-7.0]. The lesion level was cervical in 129 (43.7%), thoracic in 133 (45.1%), lumbar in 32 (10.8%) and sacral in 1 (0.3%) patient. The American Spinal Injury Association (ASIA) impairment scale was A in 192 (65.1%), B in 33 (11.2%), C in 27 (9.2%), D in 34 (11.4%) and E in 9 (1.1%). Urinary incontinence was defined as any complaint of involuntary leakage of urine during the past month. Two groups were created, comprising 138 (46.8%) continent and 157 (53.2%) incontinent patients, respectivelly.

A structured questionnaire was applied to all subjects including a detailed sexual anamnesis regarding orgasmic and ejaculatory functions, as well as the subjective satisfaction with sexual life (SSL – scale varrying from 0=dissatisfied to 10=satisfied). Moreover, the International Index of Erectile Function-5 item (IIEF-5) was applied to all subjects.

Results

Table 1 –Sexual parameters before and after SCI

	Before SCI (n=295)	*After SCI (n=295)*	*p*
Sexually active	289 (97.9%)	159 (53.9%)	<0.001
IIEF*	-	5 [0-16]	
IIEF*>17	-	63 (21.4%)	
Orgasm	286 (96.9%)	105 (35.6%)	<0.001
Masturbation	116 (39.3%)	27 (9.1%)	<0.001
Ejaculation	288 (97.6%)	61 (20.6%)	<0.001
SSL°	9 [8-10]	4 [0-6]	<0.001

* *International Index of Erectile Function*

° *Satisfaction with Sexual Life*

Table 2 – Comparisons between continent and incontinent SCI men

	Continent (n=157)	*Incontinent (n=138)*	*p*	*Odds Ratio*
Sexually active	95 (60.1%)	64 (46.3%)	0.019	1.7[1.1-2.8]
IIEF*	9 [0-17]	0 [0-13]	0.026	
IIEF*>17	37 (23.5%)	26 (18.8%)	0.393	1.3[0.7-2.3]
Orgasm	61 (46.3%)	44 (38.8%)	0.225	1.3[0.8-2.2]
Ejaculation	43 (27.3%)	18 (13.1%)	0.002	2.5[1.3-4.6]
SSSL°	5[0-6]	3[0-3]	0.036	

* *International Index of Erectile Function*

° *Subjective Satisfaction with Sexual Life*

Interpretation of results

Table 1 shows the tremendous negative impact of SCI in male sexual life, with significant reduction of sexually active men after SCI, as well as in the ability to achieve orgasm and ejaculation. Consequently, satisfaction with sexual life was markedly reduced after SCI.

Table 2 compares sexual parameters between continent and incontinent men after SCI. Continent men had better results in a number of parameters including the prevalence of sexually active men, median IIEF-5 score, ability to achieve ejaculation and the overall satisfaction with sexual life. The ability to achieve orgasm was similarly low in the two groups.

Concluding message

Sexual dysfunction is highly prevalent in SCI men and has a tremendous negative impact in the satisfaction with sexual life. Urinary incontinence is associated with worse sexual outcomes in SCI men, with inferior rates of sexually active men, decreased IIEF-5 scores, decreased ability to achieve ejaculation and overall satisfaction with sexual life.

References

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