Sexual dysfunction and the effects of aging in men with spinal cord injury

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A spinal cord injury (SCI) changes most functions below the level of lesion, including sexual function. The sexual dysfunction depends on the level of the injury as well as the extent (complete or incomplete) of the injury. Erectile dysfunction is very common among men with SCI and its cause can be physiological, psychological or both.

Effects of SCI on male sexual arousal and function:

Sexual arousal can be of psychogenic, reflexogenic, or both in origin. Current research indicates that as long as the sacral region S2-S5 remains intact, reflexogenic erection is possible through tactile contact. According to current research, men with complete spinal cord injuries above the sacral segment have 0% chance of psychogenic erection, 93% may achieve reflexogenic erection, and 4% may generate ejaculation. On the other hand, 80% of those with incomplete spinal cord injuries above the sacral segment report reflex erection, 19% report a combination of psychogenic and reflex erection and 32% are able to generate ejaculation.

In complete direct sacral injuries (lower motor neuron lesions), psychogenic erections have been reported in 26% of men with 0% reflex erections and 18% of them were able to generate ejaculation. About 67%-95% of men with incomplete (LMN) lesions have some type of erectile function and 70% are able to generate ejaculation.

Psychogenic erection is mediated through pathways originating from T11-L2 spinal segments and neurophysiological models have shown that men with lower spinal cord lesions maintain the potential of psychogenic stimulation compared to those with higher lesions who rely on reflexogenic stimulation.