

Sexual dysfunction in neurological disorders: do we see just the tip of the iceberg?

Rocco Salvatore Calabrò

IRCCS Centro Neurolesi "Bonino-Pulejo", Messina, Italy

Sir,

Sexual function, in patients with physical or neurological disabilities, is often disregarded by healthcare professionals, though it is a topic of great importance to patients and to those with whom they share significant relationships. Too often, physicians believe that sexuality is not as important as the injury or illness that brought the patient to the rehabilitation team. Nonetheless, the quality of personal relationships, sexual ones in particular, exerts great impact on a patient's self-esteem as well as on his/her support network. Any multiple physical, psychological, and emotional changes that may occur after a catastrophic injury, or as a result of a congenital disability or chronic illness, must be addressed not only to the patient's context, but also to the patient's support system.

Neurological disorders can change the processing of sexual stimuli up to preclude arousal, decrease or increase desire, or to curtail genital engorgement (1). Indeed, the interruption of the long spinal tracts between cortex and sacral cord or the pelvic autonomic nerves interferes with genital engorgement, erection, ejaculation, and climax. Neurological diseases can also challenge the physical ability to embrace, stimulate, engage in intercourse, and maintain urinary and bowel continence during sexual activity. Thus, these patients, especially if male and young, might consider their sexual loss as a most devastating aspect (2).

Demyelinating and neurodegenerative disorders, brain and spinal cord injuries and the treatments used in these diseases can often cause erectile and/or ejaculation dysfunctions or affect sexual desire, especially in young men, with a prevalence as high as 80% (1-3).

In particular, sexual dysfunctions (SD) in patients with multiple sclerosis (MS) can be divided into primary (directly due to MS-related neurologic deficits affecting the sexual response), secondary (attributed to MS-related physical impairments and symptoms that affect indirectly sexual response, including spasticity and contractures, fatigue, bladder dysfunction and cognitive symptoms), and tertiary SD (caused by the psychological, social and cultural issues of having a chronic disabling disease that affects sexual functioning (4).

Spinal cord injury (SCI) results in defects in erectile function and lubrication, ejaculatory process and orgasm, and male reproductive potential. The sexual function in different stages after SCI and the types of SD depend mainly on the completeness of the injury and the level of neurological damage. After a complete, high lesion, psychogenic erection and lubrication are lost but sexual reflexes remain intact; low lesions, especially to the cauda equina, substantially reduce erectile capacity, sensitivity to the genital area and thus orgasm (5).

All these concerns (which mainly involve but are not limited to MS and SCI) should be known and investigated by the healthcare professionals dealing with neurological patients, especially when young.

Nonetheless, when sex and disability are discussed while counseling a neurological patient, this is solely in terms of capacity, technique, and fertility, with no reference to sexual feelings, and ignoring other aspects of sexuality, such as touching, affection, and emotions (6).

Sexual function recovery is no less important than any other aspects of functional rehabilitation from a

disabling disease or injury. Indeed, people with disabilities are sexual individuals with sexual desires; their concerns require the attention of health care providers. The most popular myth surrounding people with disabilities is that they are less sexual than persons without disabilities (6). Entrenched socio-cultural beliefs have created significant barriers that prevent individuals with disabilities from exploring their sexuality; these false beliefs may be more disabling than physical impairment itself.

Sexuality is one of the most complex aspects of human life. Sexual expression is dependent on functioning anatomical and physiological systems, which are influenced by cognitive and emotional processes. To assess and treat problems in this area requires knowledge of those factors influencing both the dynamics of the relationship and the physical and psychological aspects of sexual functioning. Nevertheless, physicians usually do not pay much attention to SD in their patients, either because they are not comfortable dealing with such an issue, or partly because therapeutic possibilities are scant.

With the emerging awareness of the primary importance of life quality as the most important indicator of good patient management, and with the advent of more effective treatments of SD (2), to ignore this very important dimension of life is no longer acceptable, and we cannot stay still seeing just the tip of the iceberg.

Acknowledgements

The author would like to thank Professor Agata Grosso for revising the manuscript in the English language.

References

1. Rees PM, Fowler CJ, Maas CP. Sexual function in men and women with neurological disorders. *Lancet* 2007; 369: 512-25.
2. Calabro RS, Polimeni G, Bramanti P. Recent advances in the treatment of neurogenic erectile dysfunction. *Recent Pat CNS Drug Discov* 2014; 9: 41-53.
3. Calabrò RS, Polimeni G, Ciurleo R, Casella C, Bramanti P. Neurogenic ejaculatory disorders: focus on current and future treatments. *Recent Pat CNS Drug Discov* 2011; 6: 205-21.
4. Calabrò RS, De Luca R, Conti-Nibali V, Reitano S, Leo A, Bramanti P. Sexual dysfunction in male patients with multiple sclerosis: a need for counseling! *Int J Neurosci* 2014 Aug; 124(8): 547-57.
5. Courtois F, Charvier K. Sexual dysfunction in patients with spinal cord lesions. *Handb Clin Neurol* 2015; 130: 225-45.
6. Calabrò RS, Bramanti P. Post-stroke sexual dysfunction: an overlooked and under-addressed problem. *Disabil Rehabil* 2014; 36(3): 263-4.

Received: 27 August 2016

Accepted: 6 September 2016

Correspondence:

Rocco Salvatore Calabrò, MD, PhD

IRCCS Centro Neurolesi "Bonino-Pulejo"

S.S. 113, Contrada Casazza - 98124, Messina, Italy

Tel. +3909060128840 - Fax +3909060128950

E-mail: salbro77@tiscali.it