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Sexual dysfunction and brain tumors: why address it?

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See the article by Surbeck et al, on pages 574-579.

Sexuality is a quality of life issue that is rarely addressed by oncologists, even though cancer and its treatment frequently affect sexuality and intimacy. It is even rarer for sexuality to be addressed for patients with brain tumors. There is a greater likelihood that quality of life will be compromised as cancer treatment and detection improve. In this issue of *Neuro-Oncology*, Surbeck, Herbet, and Duffau evaluated sexuality in 32 patients with diffuse low-grade glioma (DLGG) who underwent surgical resection, an area that has not been previously addressed. Although the study was small, more than 50% of patients experienced postoperative sexual changes.

Because brain tumors do not affect sexual organs, health care practitioners might not expect to find sexual dysfunction, nor would they assess for it.³ Sexual dysfunction is characterized by a disturbance in sexual desire and the psychophysiological changes that characterize the sexual response cycle, which can cause marked distress and interpersonal difficulty. Sexual dysfunction is not limited to changes in those organs associated with sexual response. Changes in sexuality may be caused by the tumor itself; for example, men with functioning pituitary adenomas have a high incidence of sexual dysfunction.⁴ Other causes include the site of cancer, prognosis, treatment, and treatment side effects. Psychological distress associated with the diagnosis and/or treatment side effects and changes in relationships during and after treatment all have a great impact on sexual functioning.⁵

There is evidence indicating that patients prefer their health care providers to take the lead in inquiring about sexual health.⁶ It is important to remember that all patients should have the opportunity to discuss sexual matters with their health care professional regardless of age, sexual orientation, marital status, or life circumstances.⁷ The benefits of discussing sexuality with the patient are numerous and include legitimization of the topic for discussion, demonstration of a desire to treat the entire patient, not just the diseased organ, emphasis of the importance of maintaining normal activities and relationships during and after treatment, and identification of patients at risk for sexual dysfunction after treatment.^{8,9}

A review of the literature shows very few studies on brain tumors and sexual function. These studies usually point out which part of the brain affects specific sexual functions. There are some data on sexual dysfunction following other neurologic disorders such as the development of strokes, but they are limited.¹¹

The scale used to measure sexual dysfunction for this study, the French version of the Arizona Sexual Experience Scale (ASEX), is reliable and valid. ¹² It is a brief 5-item scale assessing the core elements of sexual function. ¹³ Simply asking, "What sexual changes have you noticed since your cancer diagnosis or treatment?" or "How are things going sexually?" can open up the conversation on sexual changes. Then one could address libido, arousal, and orgasm with the patient in detail if they report sexual changes.

In addressing libido, ask if the person still has sexual dreams or fantasies. If the patient's libido is down, it usually affects this too. If the patient is female, inquire about vaginal dryness, which can indicate a lack of female arousal. If the patient male, ask about morning erections as well as erections sufficient for intercourse and his ability to maintain one. For orgasm, ask if this occurs, if it takes longer or happens faster. Mention that sometimes women have orgasms with oral or manual sex and not necessarily through penile/vaginal intercourse. Even men with erectile dysfunction can continue to have orgasms with enough stimulation.

Sexual problems may not resolve after several years of disease-free survival, unlike other side effects of cancer and its treatments. ¹⁴ Interestingly, these authors found specific sexual dysfunctions associated with the part of the brain that contained the glioma, which can add to the body of knowledge on sexuality. They also found that sexual dysfunction was higher among women than men and that both women and men had a high rate of sexual concerns. For most couples, sexual intimacy is an important aspect of couple bonding, which continues to be relevant during illness and into old age, and is associated with its own physical and mental health benefits.

Knowing the high rate of sexual dysfunction in patients following surgical resection of DLGG can alert the surgeon and other health care practitioners to assess these patients for sexual dysfunction. Surbeck et al² report that awake surgery enables preservation of quality of life. Anyone with comorbid depression, which can cause sexual dysfunction twice that of controls, was excluded. According to the World Health Organization, the fulfillment of sexual health is tied to the extent to which human rights are respected, protected, and fulfilled.

Rights that are critical to sexual health as it pertains to cancer include the right to equality and nondiscrimination, privacy, the highest attainable standard of health (including sexual health), information as well as education, and freedom of opinion and expression. ¹⁶

Being able to give the patient with DLGG information and education after assessing for sexual dysfunction can improve the patient's quality of life. The focus of the paper by Surbeck et al² was not on treating sexual dysfunction but on reporting its prevalence in patients with DLGG. Practitioners need to identify their own comfort level with the topic to be able to do a sexual assessment. They need to identify colleagues capable of providing further assistance if required. This paper provides information that shows a high degree of sexual dysfunction in patients with DLGG and can therefore be a starting point for practitioners to acknowledge the sexual side effects of surgery in this patient population. It can improve the patient's quality of life. Clearly, more studies need to be done on patients with brain tumors and how this affects their sexuality.

References

- 1. Webber K, Mok K, Bennett B, et al. If I am in the mood, I enjoy it: an exploration of cancer-related fatigue and sexual functioning in women with breast cancer. *Oncologist*. 2011;16:1333–1344.
- 2. Surbeck W, Herbet G, Duffau H. Sexuality after surgery for diffuse low-grade glioma. *Neuro-Oncol*. 2015;17:574–579.
- Krychman ML, Amsterdam A, Carter J, et al. Brain cancer and sexual health: a case report. Palliat Support Care. 2004;2(3): 315-318.
- 4. Zhou RY, Wang GM, Zhang YH, et al. [Clinical trial of sexual dysfuntions in male patients with pituitary adenomas] [Article in Chinese]. *Zhonghua Yi Xue Za Zhi* 2012;92(2):110–113.
- 5. Tierney DK. Sexuality: a quality-of-life issue for cancer survivors. Semin Oncol Nurs. 2008;24:71–79.

- 6. Kaplan M, Pacelli R. The sexuality discussion: tools for the oncology nurse. *Clin J Oncol Nurs*. 2011;15:15–17.
- Leiblum S, Symonds T, Moore J, et al. A methodology study to develop and validate a screener for hypoactive sexual desire disorder in postmenopausal women. J Sex Med 2006;3: 455-464.
- 8. Pelusi J. Sexuality and body image. Research on breast cancer survivors documents altered body image and sexuality. *Am J Nurs.* 2006;106(3 Suppl):32–38.
- Speer JJ, Hillenberg B, Sugrue DP, et al. Study of sexual functioning determinants in breast cancer survivors. *Breast J.* 2005;11: 440–447.
- 10. Armstrong TS, Vera-Bolanos E, Gilbert MR. Clinical course of adult patients with ependymoma: results of the Adult Ependymoma Outcomes Project. *Cancer*. 2011;117(22):5133–5141.
- 11. Rosenbaum T, Vadas D, Kalichman L. Sexual function in post-stroke patients: considerations for future rehabilitation. *J Sex Med.* 2014;11(1):15–21.
- 12. Briki M, Haffen E, Monnin J, et al. [Sexual dysfunction and depression: Validity of a French version of the ASEX scale.]. *Encephale* 2014;40(2):114–122.
- 13. McGahuey A, Gelenberg AJ. The Arizona Sexual Experience Scale (ASEX): Reliability and validity. *J Sex Marital Ther* 2000;26(1): 25–40
- 14. Schover LR. Sexuality and fertility after cancer. Hematology Am Soc Hematol Educ Program. 2005;2005(1):523 527.
- Casper RC, Redmond DE, Katz MM, et al. Somatic symptoms in primary affective disorder. Presence and relationship to the classification of depression. Arch Gen Psychiatry 1985;42(11): 1098–1104.
- Defining sexual health. Report of a technical consultation on sexual health. 28-31 January 2002, Geneva: World Health Organization, 2006. www.who.org. Accessed November 20, 2014.