Vaginal Changes and Sexuality in Women with a History of Cervical Cancer

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**Introduction**

Local treatment of cervical cancer often involves surgery, radiotherapy, or a combination of both treatments. For early stage cervical cancer, these treatments are very effective, curing the majority of women. Unfortunately, side effects can result from both surgery and radiotherapy. The adverse effects of these treatments on women's sexual functioning have been recognized but rarely studied. In the May 6, 1999 *New England Journal of Medicine*, a report from Sweden thoroughly examines adverse treatment effects on women's sexual functioning.

**Methods**

Three hundred thirty two women with stage IB or IIA cervical cancer were invited to participate in the study. They were matched to a control group of 489 women of similar age and region of residence, who were without cervical cancer. Of the 821 women in total, 708 agreed to participate in the study and were sent a questionnaire about their sexual functioning and vaginal changes. The questionnaire was designed to assess for sexual dysfunction with attention to sexual arousal, painful intercourse, and orgasmic pleasure.

Of women with cervical cancer in this study, 52% were treated with surgery and radiotherapy (external beam, brachytherapy or both), and 36% were treated with surgery alone.

**Results**

Twenty-six percent of women treated for cervical cancer reported that vaginal lubrication during intercourse was compromised significantly compared to 11% of women in the control group. Women treated for cervical cancer also reported other indicators of sexual dysfunction more often, such as vaginal shortness and vaginal elasticity, than women in the control group. Of women who reported vaginal changes, these changes caused distress for twice as many women treated for cervical cancer as controls. Approximately 10% of women treated for cervical cancer reported intercourse to be painful compared to approximately 3% of women in the control group. The frequency and pleasure of orgasm was similar in both groups.

Analysis by treatment received for cervical cancer revealed that surgery was associated with vaginal shortening, insufficient vaginal lubrication, and reduced vaginal elasticity. When compared to surgery alone, the addition of external beam, intracavity radiotherapy or both did not affect the frequency of sexual dysfunction.

**Conclusion**
Women undergoing treatment for early stage cervical cancer develop significant vaginal changes, which are associated with sexual dysfunction. Gynecologists and radiation oncologists must be aware of these side effects, and they are encouraged to have frank discussions with their patients about the body changes that occur after surgery and radiotherapy.