

Psychosexual impact of gynaecological malignancy

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Despite being common, the impact of gynaecological malignancies on sexual functioning has been largely ignored. Many factors contribute to psychosexual morbidity in these patients, including premorbid sexual function and the physical and psychological effects of the disease and treatment(s). This review aims to highlight the factors that contribute to psychosexual morbidity and to discuss the management options that are available.

Introduction

Gynaecological malignancies as a collective group are common. They account for approximately 20% of all cancers in women. The organs involved in gynaecological malignancies are, by their nature, integral to issues of sexuality, sexual functioning and femininity. Therefore, it comes as no surprise that developing a malignancy in this area can have a significant impact on a woman's psychosexual wellbeing. The negative impact on sexual functioning of the diagnosis and treatment of gynaecological malignancies has been reported in women with cervical cancer,¹ endometrial carcinoma,² carcinoma of the vulva³ and ovarian cancer⁴ (see Table 1). A precise definition of what constitutes psychosexual dysfunction is difficult and most studies rely on changes of frequency of intercourse as a surrogate marker. However, this may not give a true picture of dysfunction^{1,3,5} as it ignores many other important aspects, such as sexual persona, orgasmic capability and sexual contact other than intercourse. One series has reported that only 50% of women were always able to complete intercourse after cervical, endometrial or ovarian malignancies.² Another series reported a reduced capacity to achieve orgasm in 40% of women with endometrial and cervical malignancies.⁵

Despite the obvious potential for psychosexual

morbidity this is an area that has been neglected in the medical literature for a long time. This may be because quality of life issues were of secondary importance to achieving cure or remission.⁶ It may also have been because, although gynaecological malignancies affect women of all ages, they are more common in later life. When studies examining psychosexual morbidity have been conducted, they have often excluded older women.^{5,7,8} The issue of sexual activity in later life remains taboo but, in fact, the majority of older women continue to be sexually active in some form beyond 70 years of age (Table 2). Within the last five years the need to address psychosexual morbidity, irrespective of the patient's age, has become more widely accepted.^{1,6}

Most studies have looked at women with a history of cervical cancer and, to a lesser extent, invasive and pre-invasive vulval lesions. There is relatively little information available on psychosexual morbidity in either endometrial or ovarian cancers, which tend to affect older women.

Development of psychosexual morbidity

Many complex factors contribute to the development of psychosexual morbidity in women with a diagnosis of, or following treatment for, a

Table 1. Degree of dysfunction in different cancers

Cancer site	Rates of psychosexual 'dysfunction' in sexually active women	Proportion of patients sexually inactive after treatment
cervix	25–40% ¹⁰	20% ¹⁰
endometrium	55–65% ^{2,8}	23%–54% ^{2,8}
ovary	34–47% ^{2,4}	33% ²
vulva	60–70% ¹⁰	30–50% ¹⁰

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Table 2. Percentage of sexually active subjects (in the general population), who find it enjoyable, by age group (modified from Read⁹).

	Age group (years)		
	50–59	60–69	70–79
All women (n=1844)	93%	81%	65%
married (n=1245)	95%	89%	81%
unmarried (n=512)	98%	63%	50%
All men (n=2402)	98%	91%	79%
married (n=1895)	98%	93%	81%
unmarried (n=414)	95%	85%	75%

gynaecological cancer. While there is often an obvious biological cause for the problem, by way of genital disruption, other factors such as premorbid sexual function,¹⁰ infertility, state of the pre-existing relationship, performance status³ and age all play a part. Age in particular is an important predictor of psychosexual morbidity as older women are more likely to cease sexual activity after surgery than younger women.^{2,3,11} Some studies have shown similar rates of low sexual interest and sexual frequency in women with and without a history of gynaecological malignancy, but women with cancer are more likely to be distressed by it.¹

The mechanism for development of psychosexual dysfunction in cancer patients can usefully be broken down into four areas:

1. The physical effects of the disease
2. The adverse effects of the treatment(s)
3. The psychosexual effects of the disease
4. The psychosexual effects of the treatment(s)

The effects of disease

The local effects of having a malignant tumour can result in sexual dysfunction prior to any treatment.¹² Vulval lesions are often pruritic or painful and may result in reduced activity, so much so that similar rates of sexual activity pre- and post-treatment have been attributed to an improvement in these symptoms after surgery.³ Cervical lesions may present with bleeding, particularly associated with intercourse. Vaginal discharge, pain and nonspecific bleeding are also common symptoms, which may contribute to a reluctance to have intercourse. Nearly 50% of women with endometrial cancer and most women with cervical cancer cease intercourse between diagnosis and treatment.⁵ The pressure effects of a large pelvic mass, from ovarian tumours or bulky cervical lesions, may also result in discomfort during intercourse.

The adverse effects of treatment(s)

Surgery

Radical gynaecological surgery can result in significant sexual morbidity. This may be due to

disfigurement and disturbance of the external genitalia in the case of vulval surgery, whereas in the treatment of cervical lesions the main problems come from changes to the vagina.

Radical vulval surgery may involve removal of the clitoris, hence inhibiting orgasmic function. Only 24–50% of women are able to achieve orgasm after vulvectomy.⁷ The surgery may reduce or obliterate the introitus, making penetrative intercourse painful or even impossible in 40% of cases.⁷ Alterations in genital sensitivity occur in 60% of women.⁷ Minimising the extent of surgery may reduce the degree of dysfunction,⁷ although this has yet to be confirmed.³ Even if the clitoris remains intact and the introitus remains adequate, psychological morbidity from the alteration in body image can cause significant dysfunction. One-third of women do not resume intercourse after treatment for vulval cancer,⁷ and reduced frequency of coitus is common in the remainder.^{3,11,13}

Radical hysterectomy shortens the vagina¹ and, if the ovaries are removed, results in the menopause. Reduction in the level of oestrogen can result in atrophic vaginitis,¹⁴ which can cause sexual difficulties such as dyspareunia.² Furthermore, the development of marked vasomotor symptoms, especially in young women, can be distressing. Increased rates of incontinence have been reported after treatment and this is associated with an adverse effect on sexual functioning.⁸ Nerve and vascular disruption to the pelvis may also result in loss of sensitivity and orgasmic disruption.¹⁰ It also renders a woman infertile, which may provoke psychosexual morbidity.

Pelvic exenteration often involves colpectomy, which prevents penetrative intercourse. There is cessation of all sexual activity in 80–90% of women undergoing this procedure.¹⁰ Vaginal reconstruction is a possibility for some women, but continuing sexual difficulties are common in this group. Despite the curative intent of this surgery, few studies have investigated interventions to reduce long-term morbidity.

Radiotherapy

Patients are frequently left with vaginal stenosis following intracavity irradiation. Radiation also causes damaging stenotic changes to the blood vessels, which interferes with vaginal lubrication.¹⁵ These changes most often appear within the first three months, but may continue to develop for up to three years after treatment.¹⁰ Radiotherapy commonly induces the menopause in susceptible women, thereby causing the problems previously described. Overall rates of psychosexual dysfunc-

tion following cervical carcinoma are similar following radiotherapy and surgery but tend to be higher if both modalities are used.¹⁰

Chemotherapy

Common adverse effects of chemotherapy include nausea and vomiting, tiredness and anaemia. All of these factors serve to reduce libido and, therefore, sexual functioning. Furthermore, such treatment may be adjuvant to other forms of treatment such as radiotherapy or surgery, thereby compounding the problems from the other therapies. Chemotherapy can also result in changes to a woman's physical appearance, such as hair loss with the use of paclitaxel, or skin changes and weight gain with the use of progestogens. Such alterations can play an important contributory role to the development of psychological morbidity¹⁶ by leaving women feeling unattractive.¹⁴

The psychosexual effects of disease

The psychosexual effects of the disease itself can result in sexual dysfunction. This may either be by avoidance of sexual activity or a dysfunctional response when activity is attempted. Fear is a common problem. Many patients do not resume intercourse initially for fear that sexual activity may cause the cancer to return.³ Fear of causing damage can result in dysfunction and this may persist after treatment, in both the woman and her partner.⁵ The woman and her partner may be fearful that the cancer can be transmitted, even when treatment is complete.^{4,5,17}

The diagnosis of a malignancy may have a negative effect on the relationship itself,¹¹ especially where there are pre-existing problems.¹⁶ This may be further compounded by sexual difficulties.¹¹ Such problems tend to be more evident in shorter-term relationships. However, while 16–20% of couples felt their relationship had deteriorated,^{5,11} 35% felt it had been strengthened by the experience.¹¹

There may also be psychological morbidity such as depression or anxiety in the woman and/or her partner^{3,13,17} that may be triggered by the diagnosis as well as the treatment. The influences of this on sexual functioning are well established.^{3,11}

The psychosexual effect of treatment(s)

Psychiatric morbidity is common after treatment of gynaecological malignancies. Up to one-third of women are depressed after vulvectomy,^{3,13} and both depression and anxiety are common after surgery for cervical cancer.¹¹

The removal of a woman's reproductive organs

results in feelings of loss of femininity in 50% of cases,^{7,14} reduced attractiveness¹¹ and significant alterations in body image.³ In women of childbearing age treatments for gynaecological cancer often induce infertility, which may cause great distress in a proportion of patients.^{1,11} Indeed, 11% of women report infertility having an adverse effect on their sexual functioning.¹ It can also cause distress in the partner, even in those who already have children, where up to 25% can be affected.

Management issues

Psychosexual functioning does not usually improve with time^{10,11} and problems remain common two or more years after treatment.¹¹ A coherent strategy, therefore, needs to be developed to deal with psychosexual dysfunction in women after treatment for a gynaecological malignancy. Even where there is a clear biological cause, as is often the case with these patients, psychological functioning often remains a potent factor that must be addressed.

Counselling

Adequate counselling around the time of diagnosis and before and during treatment is likely to prevent the onset of many of the problems described above.^{16,10} Patients commonly wish that both they and their partner had received more information on the sexual implications of the disease and its treatment.¹⁷ Health professionals tend to deal mainly with the physical issues and ignore psychosexual issues.^{6,18} This may be due to a lack of education of the health professionals, with regard to these issues, as well as their discomfort in discussing intimate topics.⁶

Patients with gynaecological malignancy have expressed the desire to speak about their psychosexual problems with other women who have been in the same situation.^{13,17} Two-thirds of women would be willing to speak to patients due to undergo surgery about the sexual ramifications of the treatment.³ Psycho-educational groups reduce fears about sex after gynaecological cancer in women of all ages.¹⁵ A model for sexual counselling suggests four areas of intervention (Table 3). Availability of trained sex therapists or the development of such skills by medical staff may improve in light of the changes recommended in the National Health Service Cancer Plan.¹⁹

Often patients need the permission of health care workers in order to resume sexual activity.³ Patients may be reluctant to seek this, and the professionals caring must broach the subject with

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Table 3. PLISSIT model for dealing with psychosexual issues²⁰

Definition	Action
Permission	encourage the patient to discuss sexual issues
Limited Information	tell the patient about the sexual implications of their disease and treatment(s)
Specific Suggestions	provide advice on specific issues, e.g. finding comfortable positions for intercourse or use of lubricants
Initiate Therapy	involve a trained sex therapist

the patient and her partner. It is important that health care workers feel at ease when discussing sexual issues with the couple, that they have a basic knowledge about the sexual consequences of the illness and its treatment, and that the question of sexual anxieties is brought up at all stages of the illness and its therapy.⁷

Treatment of depression

Despite depression being a common problem in these patients it is often left untreated by medication.³ Appropriate antidepressant medication should improve psychosexual functioning in clinically depressed patients.

Vaginal dilators

The use of vaginal dilators or stents, or alternatively regular intercourse (three times per week)¹⁵ is advocated in women receiving vaginal brachytherapy to prevent stenosis. Older women are more likely to comply with vaginal dilation than younger women (<41.5 years), but even so, most women in all age groups do not comply unless given assistance in overcoming their fears.¹⁵ Psychoeducational groups can be used to increase young women's compliance with vaginal dilation following radiotherapy,¹⁵ but even with interventions less than half will comply.

Treatment of vaginal dryness

54% of women complain of reduced lubrication following treatment for cervical cancer.¹ It is also

a common complaint among partners.⁵ Those women suffering from reduced vaginal lubrication may benefit from the use of ointments or lubricants. If linked to menopausal symptoms, the use of local or systemic oestrogen preparations may be of benefit, although caution should be exhibited in patients who have been treated for endometrial carcinoma.

Conclusion

The vast majority of studies on the psychosexual health of women following gynaecological malignancy contain few subjects, are retrospective and hence are subject to bias. The majority of studies have examined the implications of cervical cancer and, therefore, further work is needed to determine the extent and nature of psychosexual problems in relation to other gynaecological cancers. However, it is likely that sexual morbidity is a significant problem in this group of patients. Simple psychological interventions are likely to reduce the problem, but further research is needed to determine the best method and most appropriate people to provide this. An improvement in the education of health care professionals working with these patients, and an increase in the numbers of staff available, will be required in order to ensure that these women receive the support that they need. ■

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