

CERVICAL CANCER 2: TREATMENT OPTIONS AND SIDE-EFFECTS

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ABSTRACT Jefferies, H. (2008) Cervical cancer 2: treatment options and side-effects. *Nursing Times*; 104: 45, 26–27. This is the second of a two-part unit on managing cervical cancer. Part 1 covered its incidence and risk factors, screening and diagnosis, the vaccination programme, types of cervical cancer and disease spread. This second part outlines treatment and side-effects.

TREATMENT FOR CERVICAL CANCER

Treatment depends on the disease stage and the patient's age. For example, in some cases fertility-sparing treatment may be offered. Patient management should be determined at a gynaecology cancer centre by the multidisciplinary team, which includes consultant gynaecology oncologists, medical and clinical oncologists, histopathologists, cytologists and radiologists, as well as clinical nurse specialists (CNSs). The treatment may involve surgery, chemotherapy and radiotherapy, or a combination of all three. The prognosis depends on the type of cancer and the extent of the disease.

Stage 1a1

Management of stage 1a1 depends on the woman's age. It may involve a cone biopsy to remove a cone-shaped area of cervical tissue, together with a healthy area of normal tissue, to preserve fertility. Post-treatment care involves close observation in the colposcopy department. If the woman has completed her family, a total abdominal hysterectomy with or without bilateral salpingo-oophorectomy is performed.

Stage 1a2–2a

Various treatment options are available for this group of women, and include:

- Trachelectomy;
- Radical hysterectomy, with or without bilateral salpingo-oophorectomy;

LEARNING OBJECTIVES

1. Know the various treatment options for different stages of cervical cancer.
2. Be aware of the side-effects of different treatments.

- Concurrent chemotherapy and radiotherapy.

Trachelectomy: This surgery involves removing the cervix, together with the top 2–3cm of the vagina, and joining the top of the vagina to the lower segment of the uterus. It may also include the removal of the pelvic lymph nodes laparoscopically or by open surgery. This surgery enables the woman's fertility to be maintained but is only suitable for those with small tumours. These women are at increased risk of cervical incompetence and subsequent miscarriage, so a permanent suture is inserted around the lower end of the uterus to prevent this. The chances of becoming pregnant are reduced as there is no cervical mucus to encourage the sperm to move towards the egg.

Radical hysterectomy: A radical or Wertheim's hysterectomy involves the removal of the uterus, cervix, upper one-third of the vagina, parametrial tissue and bilateral pelvic lymphadenectomies. It may also include bilateral salpingo-oophorectomy. This is performed for women when the tumour is considered too large for a trachelectomy or if they have completed their family. If the lymph nodes are subsequently found to be affected by the cancer, women will require post-operative concurrent chemotherapy and radiotherapy. This surgery may be associated with bladder dysfunction, and consequently an indwelling catheter is left in situ for several days post-operatively.

Concurrent chemotherapy and radiotherapy: The radiotherapy treatment is given over a period of 27 days, Monday to Friday,

excluding weekends and bank holidays, with weekly chemotherapy with cisplatin. The addition of chemotherapy enhances the effect of the radiotherapy and sensitises the pelvic tissues (Rose et al, 1999). It is followed by internal low-dose or high-dose brachytherapy. Low-dose radiotherapy may be given over a period of 8–17 hours while high-dose is given over a period of 10 minutes on one or two occasions.

Stages 3 and 4

Women with stage 3 cancer undergo concurrent chemotherapy and radiotherapy. Those with stage 4 may have a course of inpatient chemotherapy with cisplatin and fluorouracil, depending on their renal function and World Health Organization performance status. This may be followed by a course of radiotherapy to the pelvis to control any vaginal bleeding.

Cx2 clinical trial

There is currently a Phase 2 clinical trial called the Cx2 for women with stage 1b2–4a disease. It involves a course of chemotherapy with carboplatin and paclitaxel given weekly for six cycles with review after three cycles, followed by concurrent chemotherapy and radiotherapy. For details see www.ncrndev.org.uk

CHEMOTHERAPY SIDE-EFFECTS

Chemotherapy treatment is given intravenously and affects any cells dividing rapidly, which includes healthy cells as well as malignant ones. The side-effects include:

- Nausea;
- Altered taste;
- Constipation;
- Immunosuppression;
- Hearing loss;
- Peripheral neuropathy;
- Skin reactions.

Anti-emetics are given before treatment and for three days post-treatment. Women are advised to check their temperature and contact the chemotherapy department if it is over 38°C as antibiotics will be required.



RADIOTHERAPY SIDE-EFFECTS

Radiotherapy is known to cause early side-effects, occurring within the first six months of completing treatment, and late side-effects, which may develop up to five years after treatment. Early side-effects include:

- Tiredness;
- Cystitis;
- Diarrhoea;
- Skin changes, such as erythema, dry and moist desquamation and loss of pubic hair.

Late side-effects may include:

- Cystitis;
- Urinary urgency;
- Rectal bleeding;
- Radiation damage to the bowel;
- Loss of fertility;
- Vaginal stenosis;
- Loss of lubrication in the vagina, causing dryness;
- Musculoskeletal damage;
- Menopausal symptoms.

Prevalence of late side-effects has been estimated at between 5–20% (Tan et al, 2004). They were shown to affect 10% of women with cervical cancer in a more recent study by King et al (2006).

PSYCHOSEXUAL IMPACT

Cancer treatment is known to have a negative effect on sexuality and sexual function. The psychological impacts

associated with radiotherapy include an altered body image and loss of femininity due to the loss of fertility. In addition, the effect of the radiotherapy can cause dyspareunia. Jensen et al (2003) reported that women had persistent sexual dysfunction and adverse vaginal changes for two years after completing radiotherapy. White and Faithfull (2006) also described the impact of these changes.

Changes to the vagina may subsequently impact on sexual function, sexual health and well-being, as well as causing considerable distress for women and their partners. For further information on using vaginal dilators, see Jefferies et al (2007).

OTHER ISSUES

Since radiotherapy treatment for cervical cancer affects ovarian function, women are given hormone replacement therapy to prevent osteoporosis, heart disease and cerebrovascular accidents.

Currently women with cervical cancer are seen for follow-up every three months for one year, four months for two years and six months for two years before being discharged.

In the event of a recurrence, there may be several different treatment options. If the recurrence occurs centrally in the cervix, surgery with a total pelvic exenteration may be possible. This involves the formation of a colostomy and an ileal conduit, and the removal of the bladder, rectum, uterus, fallopian tubes and ovaries, cervix and vagina. This is a major operation involving four consultants. Input from stoma nurses is advised as soon as possible. It is also recommended that patients see a consultant psychologist or psychiatrist pre-operatively as the surgery has a major effect on post-operative body image.

It is not possible to give radiotherapy to an area of the body which has already been irradiated but palliative chemotherapy may be a treatment option. For women about to enter the terminal phase of cervical cancer, early referral to the community palliative care team and inclusion on the Gold Standards Framework register for GPs and district nurses is advised.

THE CNS ROLE

The role of the CNS in the care of women with cervical cancer and their families starts from the time that a cancer diagnosis

KEY REFERENCES

Jefferies, H. et al (2007) Guidelines on vaginal dilator use after pelvic radiotherapy. *Nursing Times*; 103: 30, 28–29.

King, M. et al (2006) Improved survival after concurrent weekly cisplatin and radiotherapy for cervical carcinoma with assessment of acute and late side-effects. *Clinical Oncology*; 18: 38–45.

White, I.D., Faithfull, S. (2006) Vaginal dilatation associated with pelvic radiotherapy: a UK survey of current practice. *International Journal of Gynecological Cancer*; 16: 3, 1140–1146.

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is suspected and continues until the nurse is no longer needed. It involves building up a therapeutic relationship and the provision of informational, emotional, psychological and psychosexual support. In particular:

- Being there when a cancer diagnosis is given, at the time of recurrence or when entering the palliative phase;
- Providing accurate information and suggesting access to relevant resources;
- Drawing diagrams to explain the extent of the disease;
- Using appropriate language that patients, families and carers can understand;
- Providing specialist advice regarding fertility options, for example it may be possible to harvest eggs before surgery or radiotherapy treatment;
- Guidance on managing short-term and long-term side-effects from treatment, for example the use of vaginal dilators to prevent stenosis;
- Referral to other healthcare professionals, for example clinical psychologist, occupational therapist, social worker, lymphoedema CNS, dietitian, district nurses, hospice team;
- Giving advice, for example on how to talk to patients' children or parents;
- Acting as a resource in obtaining financial benefits, such as Disability Living Allowance or Attendance Allowance and advice about obtaining a Blue Badge car sticker;
- Contacting Macmillan Cancer Support for information, advice and financial grants. ■

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