NHS
National Institute for Health and Clinical Excellence

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High dose rate brachytherapy for carcinoma of the cervix

Understanding NICE guidance – information for people considering the procedure, and for the public

Information about NICE Interventional Procedure Guidance 160

Ordering information

You can download the following documents from www.nice.org.uk/IPG160

- this booklet
- the full guidance on this procedure.

For printed copies of the full guidance or information for the public, phone the NHS Response Line on 0870 1555 455 and quote:

- N0996 (full guidance)
- N0997 (information for the public).

National Institute for Health and Clinical Excellence
MidCity Place
71 High Holborn
London
WC1V 6NA

www.nice.org.uk

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About this information

The National Institute for Health and Clinical Excellence (NICE) is the independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health. One of NICE's roles is to produce guidance (recommendations) on whether interventional procedures are safe enough and work well enough to be used routinely in the NHS in England, Wales and Scotland.

This information describes the guidance that NICE has issued on a procedure called high dose rate brachytherapy for carcinoma of the cervix (cervical cancer). It is not a complete description of what is involved in the procedure – the patient's healthcare team should describe it in detail.

NICE has looked at whether high dose rate brachytherapy is safe enough and works well enough for it to be used routinely for the treatment of cervical cancer.

To produce this guidance, NICE has:

- looked at the results of studies on the safety of high dose rate brachytherapy for cervical cancer and how well it works
- asked experts for their opinions
- asked the views of the organisations that speak for the healthcare professionals and the patients and carers who will be affected by this guidance.

This guidance is part of NICE's work on 'interventional procedures' (see 'Further information' on page 10).

About the procedure

Cervical cancer can be treated with surgery, radiotherapy, chemotherapy or a combination of these. Brachytherapy is a form of radiotherapy in which the radiation is delivered directly onto the tissue being treated. This means the device that delivers the radiation must be placed in the woman's vagina next to the cervix. The radiation can be given in low, medium or high doses. Low dose rate brachytherapy delivers the radiation slowly, and this means that to get a high enough dose to be effective, the device that delivers the radiation has to be in place in the woman's vagina for 2–3 days.

The new procedure NICE has looked at, called high dose rate brachytherapy, has been developed to reduce the time over which the woman has to have the radiation delivered. The device that delivers the radiation is placed in the cervix and is connected to the machine that produces the radiation. The radiation is delivered to the cervix for a few minutes. This may be repeated several times, with a few days' gap between doses. The woman nearly always has standard radiotherapy as well as high dose rate brachytherapy.

How well the procedure works

What the studies said

Two studies showed that there were no real differences between women who'd had high dose rate brachytherapy and those who'd had low dose rate brachytherapy in terms of the number of women alive 3 and 5 years later. The results were also similar to those in women who had medium dose rate brachytherapy.

Four studies reported the number of women whose cancer went on to spread to other places in the body after they'd had high dose rate brachytherapy. This happened in: 15 out of 236 women (6%) in one study; in 372 out of 1992 women (19%) in the second study; in 43 out of 200 women (22%) in the third study; and in 25 out of 112 women (22%) in the fourth study. Three of these studies also reported the number of women whose cancer returned in the cervix – this happened in: 51 out of 236 women (22%); 415 out of 1992 women (21%); and in 7 out of 112 women (6%). These studies checked on women for 3 to 10 years after they'd had radiotherapy.

What the experts said

Some of the experts thought that high dose rate brachytherapy worked as well as low dose rate brachytherapy.

Risks and possible problems with the procedure

What the studies said

In a study that followed what happened in 1992 women for an average of 8 years after high dose rate brachytherapy, 35 in every 100 women had a problem affecting their bowel or bladder.

Where the study reports contained information on specific problems, there were problems affecting the rectum in 4% to 20% of women, and bladder problems in 4% of women (4% is the same as saying 4 women in 100). Serious complications such as a blockage in the bowel, severe rectal bleeding and narrowing of the bowel, which required surgery, affected 2% and 6% of women in two studies.

What the experts said

The experts said that women could have diarrhoea, bleeding, colitis (inflammation of the bowel) and cystitis (infection of the urine system) as side effects of the procedure. Another possibility was that an abnormal connection might be formed between the vagina and the bladder or the bowel (called a fistula) – the woman would need further surgery if this happened. They also said that long-term problems affecting the bowel, bladder and rectum were possible.

What has NICE decided?

NICE has considered the evidence on high dose rate brachytherapy. It has recommended that when doctors use this procedure for women with cervical cancer, they should be sure that:

- the woman understands what is involved and agrees (consents) to the treatment
- the woman is offered effective pain relief, and
- the results of the procedure are monitored.

Other comments from NICE

This procedure can be very painful.

What the decision means for you

Your doctor may have offered you high dose rate brachytherapy. NICE has considered this procedure because it is relatively new. NICE has decided that the procedure is safe enough and works well enough for use in the NHS. Nonetheless, you should understand the benefits and risks of high dose rate brachytherapy before you agree to it. Your doctor should discuss the benefits and risks with you. Some of these may be described above.

This procedure can be painful and you should be offered effective pain relief.

Further information

You have the right to be fully informed and to share in decision-making about the treatment you receive. You may want to discuss this guidance with the doctors and nurses looking after you.

The NICE website (www.nice.org.uk) has further information about NICE, the Interventional Procedures Programme and the full guidance on high dose rate brachytherapy for carcinoma of the cervix that has been issued to the NHS. The evidence that NICE considered in developing this guidance is also available from the NICE website.

If you have access to the internet, you can find more information on cervical cancer on the NHS Direct website (www.nhsdirect.nhs.uk).

You can also phone NHS Direct on 0845 46 47.

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MidCity Place
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WC1V 6NA

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