Northern Ireland cervical screening programme

Information for primary care and smear takers

Cervical Screening

From January 2011, the Northern Ireland cervical screening programme will no longer invite women aged under 25 to attend for screening. In addition, the screening interval for women aged 25–49 will be reduced to every three years. Women aged 50–64 will continue to be offered screening on a five yearly basis.

This booklet describes the rationale for the change in policy, so that primary care staff and smear takers can provide appropriate and accurate advice to patients who have queries about this issue.

In addition, the booklet provides an update on other key aspects of the screening programme, including:

- screening advice to lesbian women;
- informed decision making;
- assessment of young women with abnormal vaginal bleeding.

Purpose of cervical screening

The aim of the cervical screening programme is to prevent cervical cancer in women who do not have any symptoms of the disease. It does this by identifying and treating women with cervical abnormalities that could develop into cancer in the future if left untreated.

Cervical abnormalities and cervical cancer

Each year, about 80 women in Northern Ireland are diagnosed with cervical cancer and 20 to 30 die from it.[1] Early detection and treatment can prevent 7 out of 10 cervical cancers.

Although cervical cancer is rare, cellular abnormalities of the cervix are common. Approximately 7% of all women who have a cervical screening test have an abnormal test result (**dyskaryosis**). Abnormalities are categorised into low grade (mild or borderline) or high grade (moderate or severe) lesions. On rare occasions a possible invasive carcinoma may be identified. All individuals with a high grade lesion are referred to colposcopy for further assessment. Low grade lesions are managed by either an early repeat screening test or referral to colposcopy. At colposcopy, cell changes may be confirmed by a biopsy. These are called **cervical intra-epithelial neoplasia** – more commonly known as **CIN**. A scale of 1 to 3 is used to describe the various stages of change.

- CIN 1 – only a third of the cells in the affected area are abnormal. These may be left to see if they return to normal themselves, or they may be treated.
- CIN 2 – up to two thirds of the cells in the affected area are abnormal. Treatment will usually be needed.
- CIN 3 – all the cells in the affected area are abnormal. Treatment will be needed.

Only very rarely will a biopsy show cell changes that have already developed into cancer.

HPV infection

Most cervical abnormalities are caused by the human papillomavirus (HPV). This is a very common virus and about 8 out of 10 people will catch it at some time in their lives. The virus usually causes no symptoms and is mainly spread by skin-to-skin contact during sexual activity.

There are over 100 different types of HPV. Most types are harmless and only some ‘high risk’ types are associated with cancer. High risk types of HPV cause 99% of cases of cervical cancer.

The majority of HPV infections are cleared by the immune system, with clearance times ranging from 5 to 25 months.[2] Cervical cancer is only linked to persistent infection with high risk HPV types.[2] Recent and transient HPV infections are associated with a very low risk of CIN 2 or more advanced abnormalities.[3]

Ongoing studies and pilot projects across the UK are exploring if, and how, HPV testing of cervical samples should be incorporated into the screening pathway.

Who should be screened?

In Northern Ireland, screening is aimed at all women aged 25–64. Women will be routinely invited every three years if aged 25–49, and every five years if aged 50–64. Women over 64 years can be screened if their previous three tests did not give a normal result or if they have never been screened.

Some common questions arise about the eligibility of certain groups of women:

Women who have never had sex

Women who have never had sex are at low risk, but not at no risk, of developing cervical cancer as:

- not all squamous carcinomas of the cervix may be linked to HPV infection;
- adenocarcinomas, which can occur in any woman, may also be identified at screening;
- HPV can be passed on in other forms of sexual activity apart from full intercourse.

Women should be advised accordingly so they can make an informed decision to decline a screening test on the basis that they have never had sex. Some women may still consider the screening test worthwhile.

Women who have not been sexually active for a long time

Changes in the cervix can take many years to develop. If a woman has ever been sexually active, it is important that she continues to have regular screening tests.

Lesbian women

Lesbian women can get infected with HPV and develop cervical cancer. Like other sexually transmitted infections, HPV can be passed between women through oral sex, transferring vaginal fluids on hands and fingers, and sharing sex toys. Lesbian women may also have experienced penetrative sex with a man at some time. They should therefore be offered cervical screening and be encouraged to participate in the programme.

Women who have had the HPV vaccine

The vaccine currently in use protects against two of the high risk types of HPV. These two types cause 70% of cervical cancers. The vaccine will not protect against other high risk HPV types or any infections which may have been picked up before vaccination took place. It is still important for these women to be offered screening.

Women who have had a total hysterectomy

Women who have had a total hysterectomy and have had their cervix removed are permanently ceased from the screening programme. Vault smears are not part of the screening programme and advice on the need for these, and frequency, should be sought from the treating gynaecologist on an individual patient basis.

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Rationale for not screening women aged under 25

The policy to start screening at age 25 is in line with the recommendations of the majority of states in the European Union and the World Health Organization. It is based on achieving an acceptable balance between benefit and harm of a population screening programme.

Screening women aged 20–24 does not reduce their risk of developing cervical cancer

- Since the introduction of the screening programme to the UK, the incidence of cervical cancer in women aged 20–24 has remained largely the same. In contrast, the number of cervical cancers in women aged 30 and over decreased significantly after 1988.
- A population-based case control study in England showed that women who have been screened at age 20–24 are as likely to develop cancer as women who have not been screened at that age.[4]

Screening women aged 20–24 detects many transient abnormalities that would never progress to cancer

- Abnormalities of the cervix are common in women in their 20s. In Northern Ireland, about 1 in 5 screened women aged 20–24 have an abnormal result, compared to 1 in 14 women over 25.
- The high incidence of cervical abnormalities in this age group is linked to higher prevalence of HPV infection. However, the infection is less likely to persist in younger women than older women.[3]
- The vast majority of cervical abnormalities do not progress to cancer but regress spontaneously within one to six years.[5,6] Where cervical abnormalities occur, they are more likely to regress in younger women than in older women.[7,8,9,10]

Screen-detected transient abnormalities lead to further investigations and often unnecessary treatment

- An abnormal screening test, even if low grade, can cause emotional harm. Although the majority of abnormal test results in women under 25 are due to harmless changes, it is not possible to predict which ones will progress to cancer. Screening this age group results in a large number of women experiencing unnecessary anxiety and undergoing treatment which they do not need.
- Cervical abnormalities are treated by removing the affected tissue – usually by Large Loop Excision of the Transformation Zone (LLETZ). Women treated with LLETZ are 1.7 times more likely to have a premature birth (at an average gestational age of 33 weeks) compared to untreated women.[11,12,13,14] Any treatment of the cervix that is not necessary should be avoided.

Rationale for screening younger women on a three yearly basis

The NHS Cervical Screening Programme commissioned a case-control study using the screening histories of women within the UK screening programme databases.[15]

The findings showed that a negative screening test in the previous five years offers considerable protection (83%) against invasive cervical cancer in women aged 55–69. Women aged 40–54 need to have had a negative screening test in the previous three years to achieve a similar level of protection (84%). Screening is less effective at preventing cancers in younger women.

The UK National Screening Committee recommends that the optimal screening intervals to achieve benefit, whilst remaining cost-effective, are three yearly for women aged 25–49 and five yearly for women aged 50–64.

The new policy on age range and screening intervals will offer all women at least 12 opportunities for screening during a lifetime. This compares to nine screens per lifetime under the previous policy.

Informed decision-making to participate

All women invited for screening should be supported to make an informed decision as to whether or not to participate. This information should be balanced, describing both the benefits and potential harms of screening, including the consequences of an abnormal screening result.

A series of new patient information leaflets on the programme has been developed. These leaflets should be made available to all women at the appropriate stage of the screening pathway to support informed decision-making, ie *It's best to take the test* should accompany the invitation, while *Your results explained* now describes all results and should be issued by the smear takers at the test.

Further copies of the leaflets are available from the appropriate health promotion/improvement department at your local Trust. All previous leaflets should no longer be used.

Assessing young women with abnormal vaginal bleeding

There is no clinical indication for a cervical screening test. Screening tests are not diagnostic and should not be performed on women presenting with symptoms suggestive of cervical cancer, such as abnormal vaginal bleeding. The critical intervention is an immediate speculum examination to visualise the cervix: if the cervix looks abnormal and suspicious, an urgent referral to colposcopy is required.

Clinical practice guidance on the assessment of young women aged 20–24 with abnormal vaginal bleeding has been endorsed by the Chief Medical Officer for Northern Ireland.

The clinical practice guidance can be found at www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_113478

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Central health promotion resource services – Health and Social Care Trusts

Belfast Health and Social Care Trust

Note: For provision of leaflets, BHSCT also covers South Eastern HSCT
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Tel: 028 9056 5862
Email: maureen.stephen@belfasttrust.hscni.net

Northern Health and Social Care Trust

Health Improvement Team,
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Tel: 028 2563 5575
Email: health.promotion2@northerntrust.hscni.net

Southern Health and Social Care Trust

Promoting Wellbeing Team,
St Luke's Hospital,
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Armagh BT61 7NQ
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Email: janis.faloon@southerntrust.hscni.net

Western Health and Social Care Trust

Health Promotion Department,
Maple Villa,
Gransha Park,
Londonderry BT47 6WJ
Tel: 028 7186 5127
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HSC Public Health Agency

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