NHS
Cancer Screening Programmes

Protocols for the surveillance of women at higher risk of developing breast cancer

Version 4

NHSBSP Publication no 74 – June 2013

About the NHS Cancer Screening Programmes

The national office of the NHS Cancer Screening Programmes is operated by Public Health England. Its role is to provide national management, coordination, and quality assurance of the three cancer screening programmes for breast, cervical, and bowel cancer.

About Public Health England

We work with national and local government, industry and the NHS to protect and improve the nation's health and support healthier choices. We address inequalities by focusing on removing barriers to good health.

We were established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service.

Editor: Kiera Chapman
Designer: Mary Greatorex

Published July 2013
PHE gateway number:

Document Information	
Title	Protocols for the surveillance of women at higher risk of developing breast cancer
Policy/document type	Numbered series 74
Electronic publication date	June 2013
Version	4. Version 4 contains new information on screening women with Li-Fraumeni syndrome. Version 3 corrected an error in Version 2 on the screening age range for women who received supradiaphragmatic radiation (Ref 4 in Section 3).
Superseded publications	Versions 1-3
Review date	None
Author/s	National Office
Owner	Comments may be sent to Kiera Chapman, kiera.chapman@phe.gov.uk in readiness for review.
Document objective (clinical/healthcare/social questions covered)	To outline protocols for the surveillance of women at very high risk of breast cancer
Population affected	Women eligible for routine and higher-risk breast screening
Target audience	QA Radiographers, Physicists

Contents

Introduction

1. Policy context

The Cancer Reform Strategy[1] recognised that the protocols for the surveillance of women identified as being at increased risk of developing breast cancer have previously varied across the country. The strategy recommended that all women identified as being at higher risk should be offered the opportunity to have their risk assessed and, where appropriate, to discuss their risk management options, in accordance with guidelines published by the National Institute for Health and Clinical Excellence (NICE).[2]

Improving Outcomes; A Strategy for Cancer[3] reported that the NHS Breast Screening Programme (NHSBSP) was in a position to manage the surveillance of women at higher risk to national standards across England, thus ensuring that this group received a consistent and high-quality service. The report concluded that surveillance with digital X-ray mammography and MRI should be provided where appropriate.

Referrals into the NHSBSP should only be via a Genetics Service or an oncologist (in the case of women treated with supradiaphragmatic radiotherapy).

2. Available NHSBSP guidance

In January 2012 the Advisory Committee on Breast Cancer Screening agreed a set of imaging protocols for a selected group of high-risk women. These are presented in this document (NHSBSP Publication no 74). Further recommendations applicable to other high-risk groups are expected to follow in due course.

For technical guidance on the use of MRI for the surveillance of high-risk groups, please consult NHSBSP Publication No 68, *Technical guidelines for Magnetic Resonance Imaging for the surveillance of women at higher risk of developing breast cancer.*[4]

For case studies on the practical management of higher-risk breast cancer screening, see NHSBSP Occasional Report 12/01, *Managing women at higher risk of developing breast cancer in the NHSBSP: Case studies from the demonstration sites.*[5]

For the evidence underpinning the surveillance protocols for women at higher-risk of developing breast cancer, see NHSBSP Occasional Report 12/04, *Report of the Working Party for Higher Risk Breast Screening.*[6]

3. Updated NICE guidance on women with a familial history of breast cancer

The National Institute for Health and Care Excellence (NICE) updated their guidance on women with a familial history of breast cancer in June 2013.[7] The NHSBSP's protocols for screening women with TP53 mutations (i.e. those with Li-Fraumeni syndrome) have now been modified to bring them into line with the new guidance.

Protocols for the surveillance of women at higher risk of developing breast cancer

Ref	Risk	Ages	Surveillance Protocol	Frequency	Notes
1	a) *BRCA1* or b) *BRCA2* carrier or c) Not tested, equivalent high risk	20-29 30-39 40-49 50+	n/a MRI MRI + Mammography Mammography ± MRI	n/a Annual Annual Annual	Review MRI annually on basis of background density
2	*TP53* (Li-Fraumeni)	20+	MRI	Annual	No mammography
3a	A-T homozygotes	25+	MRI	Annual	No mammography
3b	A-T heterozygotes	40-49 50+	Mammography Mammography	18 monthly Routine screening (3 yearly)	Routine screening from 50
4	Supradiaphragmatic radiotherapy-irradiated below age 30.	30-39 40-49 50+	MRI MRI ± Mammography Mammography ± MRI	Annual Annual Annual	Surveillance commences at 30, or 8 years after first irradiation, whichever is the later. Review MRI annually on basis of background density.

Policy for short term recalls:

5a	Repeat MRI < 6 weeks		If recall is within 6 weeks of the original assessment then it should be part of the same episode
5b	Repeat MRI > 6 weeks		If recall is after 6 weeks then should be logged as a short term recall episode. If recall then usually it would be at 6 months.

Protocols for the surveillance of women at higher risk of developing breast cancer

NOTES

1. All mammography must be direct digital mammography to optimise dose and sensitivity.

2. All MRI must be carried out in accordance with *Technical Guidelines for Magnetic Resonance Imaging for the Surveillance of Women at High Risk of Developing Breast Cancer* (NHSBSP Publication No 68). Sheffield: NHS Cancer Screening Programmes, January 2012.

3. Background density assessment for continuation of MRI should be based on individual clinical judgement.

4. Where a woman cannot tolerate MRI, she and her lead radiologist should discuss and agree potential alternatives (e.g. wide scanners).

5. Screening should be suspended during pregnancy until about 6 weeks after cessation of lactation, due to the fact that the high density of the lactating breast inhibits interpretation of the image.

6. Ultrasound should not be used as a routine screening or surveillance technique.

7. For waiting time purposes, the 62 day wait period begins with the decision to recall for assessment. Where two screening examinations take place (mammography and MRI) the clock starts when the second examination is reported, provided that no other investigation has been deemed necessary after the initial mammography. If an abnormality is seen on the first examination then this should be investigated immediately, and the 62 day wait begins straight away.

8. Supradiaphragmatic radiotherapy means any treatment in the area of the thorax.

9. Untested but equivalent high risk would be as defined by a Geneticist.

References

1. *Cancer Reform Strategy.* London: Department of Health, 2007. Available at:http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/dh_081006 .

2. *Familial breast cancer: the classification and care of women at risk of familial breast cancer in primary, secondary, and tertiary care (Clinical Guideline CG41: partial update of CG14)*. London: National Institute for Health and Clinical Excellence (NICE), 2006. Available at: http://www.nice.org.uk/article.asp?a=30600

3. *Improving outcomes: a strategy for cancer.* London: Department of Health, 2011. Available at: *http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_123371*

4. *Technical guidelines for Magnetic Resonance Imaging for the surveillance of women at higher risk of developing breast cancer* (NHSBSP Publication No 68). Sheffield: NHS Cancer Screening Programmes, 2012.

5. *Managing women at higher risk of developing breast cancer in the NHSBSP: Case studies from the demonstration sites* (NHSBSP Occasional Report 12/01). Sheffield: NHS Cancer Screening Programmes, 2012.

6. *Report of the Working Party for Higher Risk Breast Screening* (NHSBSP Occasional Report 12/04). Sheffield: NHS Cancer Screening Programmes, 2012.

7. *Familial breast cancer. Classification and care of people at risk of familial breast cancer and management of breast cancer and related risks in people with a family history of breast cancer* (NICE clinical guidelines 164). Manchester: NICE, June 2013.