

Significant variations between NHS hospitals in adverse outcomes for treatment of DCIS

March 21 2014

Analysis of data from the UK NHS Breast Screening Programme has shown significant variations in the outcomes of treatment for women with ductal carcinoma in situ (DCIS) between UK hospitals.

Dr Jeremy Thomas, a consultant pathologist at the Western General Hospital, Edinburgh, UK, told the European Breast Cancer Conference today (Friday) that although the majority of women with DCIS received the correct surgery for their disease, large numbers of women were undergoing mastectomy for DCIS either as a result of failed breast conservation surgery or for tumours that turned out to be smaller than 20mm in diameter and therefore should normally have had a lumpectomy rather than a mastectomy.

DCIS is a form of breast cancer in which cells in some of the milk ducts in the breast have started to turn into [cancer cells](#). These cells are contained within the ducts and have not started to spread to the surrounding [breast tissue](#). However, it can be difficult to identify correctly the extent of the disease because the cancer cells do not necessarily form one clearly delineated lump, but show up on mammograms and in pathological specimens as clusters of tiny specks of calcification in a number of ducts. Decisions about how women with DCIS should be treated are taken in multidisciplinary teams that include radiologists, pathologists, surgeons, oncologists and nurses.

"It would appear from our data that, in some hospitals, the discussions in the multidisciplinary teams are not looking in enough detail at the results

from the mammograms and pathology in order to make the right decision about the best surgical treatment for these women," said Dr Thomas.

"DCIS accounts for about 20% of the cancers detected and managed by the NHS Breast Screening Programme and overall our data show that the NHS Breast Screening Programme is working very well in what we would all regard as one of the most challenging parts of [breast screening](#) practice. After all, 88% of breast conservations are successful and 80% of mastectomies are carried out for tumours bigger than 20mm wide. Nevertheless, our data show there is a range of outcomes in different hospitals and we need to explore why that is the case and disseminate the highest standards across the Programme."

Dr Thomas and his colleagues in The Sloane Project – a multidisciplinary, UK-wide prospective audit of screen-detected non-invasive breast cancers and atypical hyperplasias – collected data from 8,313 patients with DCIS detected during screening from 2003 onwards.

They found that of 6,633 women who embarked on breast conservation surgery (lumpectomy), 799 (12%) required a subsequent mastectomy. Failed breast conservation surgery accounted for a third of all the women who ended up having a mastectomy, and was usually because of under-estimation of the extent of the disease from the mammograms. The total number of women who had mastectomies, including those for whom mastectomy was the first course of action as well as those who had failed breast conservation, was 2,479; of these, 510 (21%) had mastectomies for tumours smaller than 20mm in diameter, which would normally have been better treated with a lumpectomy.

"These two groups of women – those having a mastectomy after failed breast conservation and those having a mastectomy for tumours smaller than 20mm – accounted for 49% of all mastectomies," said Dr Thomas.

"We have analysed the data further and found that there are no significant differences in the main data measurables available from analyses of the mammograms and the pathological specimens. This suggests that the wide variation between hospitals that we have identified is arising during the multidisciplinary assessments where treatment decisions are made."

To analyse the variations between hospitals, Dr Thomas and his colleagues selected 57 hospitals that had submitted data on the highest number of patients. These hospitals had data on between 50 and 387 cases each, making a total of over 6,000 patients, which was around 80% of the total number of women being studied. The proportion of failed breast conservation surgery in these hospitals ranged from 3-32%, while the proportion of mastectomies for small tumours ranged from 0-60%.

The researchers then divided the 57 hospitals into three subgroups, with 19 hospitals in each, based on how often the wrong surgery was carried out. In the high frequency group for failed conservation surgery there was an adverse outcome on average in 22.3% of cases, in the medium group in 13.4% of cases, and in the low group in 7% of cases. "While this variation is highly significant, we found that there were no significant pathological and radiological differences in these cases, and, therefore, we argue that it is much more likely to be variation in practice that is the problem, rather than variation amongst patients," said Dr Thomas.

He concluded: "The Sloane Project is probably the first in the world to audit outcomes for DCIS on a large scale like this. These initial figures show that the UK NHS Screening Programme is working well and that the right surgical decisions are being made in the majority of cases. However, the significant variation between hospitals shows that we can do better. Our data provide an evidence base against which future performance can be measured, so that standards can be improved."

Professor David Cameron, from the University of Edinburgh (Edinburgh, UK), who is a member of the EBCC-9 executive scientific committee, commented: "This country-wide audit demonstrates the importance of investing in national approaches to data collection and analysis. DCIS is of increasing importance in the management of screen-detected breast cancer, and these data highlight the need to ensure that patients diagnosed through national screening programmes get the same quality of care irrespective of the [hospital](#) to which they are referred."

More information: O-405, "Adverse outcomes in the treatment of ductal carcinoma in situ in the UK NHS Breast Screening Programme 2003-2012". Friday 21 March, Management of screen detected cancer session, 08.45-10.15 hrs GMT, Hall 2.

Provided by ECCO-the European CanCer Organisation

Citation: Significant variations between NHS hospitals in adverse outcomes for treatment of DCIS (2014, March 21) retrieved 28 April 2024 from <https://medicalxpress.com/news/2014-03-significant-variations-nhs-hospitals-adverse.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--