

CORRESPONDENCE

The Incidence of Interval Cancers in the German Mammography Screening Program: Results From the Population-Based Cancer Registry in North Rhine–Westphalia

by Dr. med. Oliver Heidinger, Dipl.-Soz. Wolf Ulrich Batzler, Dr. rer. medic. Volker Krieg, Dr. med. Stefanie Weigel, Dr. rer. nat. Cornelis Biesheuvel, Prof. Dr. med. Walter Heindel, Prof. Dr. med. Hans-Werner Hense in volume 46/2012

Differentiation of Breast Cancers Is Missing

In an article that is otherwise very clearly structured I am missing the differentiation of different breast cancers.

In my personal environment, an invasive, lobular breast cancer measuring 20 mm was detected, by means of sonography, 11 months after the preceding mammography screening examination, which, when the mammograms were analyzed retrospectively, still remained undetectable. This is obviously a methodological problem since—as our radiological colleagues assure us—these tumors cannot be detected by mammography. Since they account for 15–20% of breast cancers, this result is not negligible. This is neither an interval cancer nor technical or human failure.

Reports from normal mammograms back to referrers do not include any mention of the fact that these cancers can be detected only by additional sonography—even if screening uses merely mammography, for financial reasons.

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Conflict of interest statement

The author declares that no conflict of interest exists.

In Reply:

According to the definition provided by the European guidelines, the case of the tumor described by Dr Weth is that of a typical interval cancer. The tumor was diagnosed outside the cancer screening program after a negative screening result and before the next regular screening round, and the cancer did not have a visible correlate in the obtained mammogram even when this was re-analyzed. In terms of its categorization, this is therefore a genuine interval cancer. The assumption that the tumor must have been present at the time of the screening examination, and at a size that would have been detectable by ultrasound, is speculation.

A current ultrasound study from the national mammography screening program shows that when larger numbers of cases are studied (n=2803), the detection of additional breast cancers in the course of diagnostic evaluation using systematic bilateral ultrasound is low, at 0.21% (6/2803) (1), even though individual cases of breast cancer have been diagnosed by ultrasonography after a negative screening mammogram.

We are currently preparing a publication that deals, among other issues, with the distribution of different histological subtypes of breast cancer, relative to the modality of their detection. We agree with Dr Weth that invasive lobular cancers (ILC) account for some 20% of cases. Before mammography screening was introduced, the proportion of women aged 50–69 years in North Rhine–Westphalia (NRW) was 19.2%. By comparison, of the tumors detected by screening, ILC accounted only for a slightly lower proportion, and this is not fundamentally different for interval cancers. If digital mammography, as used in NRW, were a limited modality by which to detect ILC—especially in patients with dense breast tissues—then this tumor type would have to be clearly overrepresented among interval cancers. This, however, is certainly not the case. DOI: 10.3238/arztebl.2013.0253b

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Dr. Heidinger is managing director of the Epidemiological Cancer Registry North Rhine–Westphalia (Epidemiologisches Krebsregister NRW GmbH). Dipl.-Soz. Batzler and Dr. Krieg are employees of the registry.

Dr. med. Weigel is a scientific employee of the Westphalia Wilhelm University of Münster, specializing in medicine. Her duties include scientific research and teaching, for example for the Mammography Reference Centre, a third party-funded project at Münster University Hospital.

Until his death, Dr. rer. nat. Biesheuvel worked as an epidemiologist for the Mammography Reference Centre, a third party-funded project at Münster University Hospital.

Prof. Dr. med. Heindel runs the Mammography Reference Centre, a third party-funded project at Münster University Hospital. He manages other third-party funding for research projects into breast cancer screening of the EU (High Resolution X-Ray Imaging for Improved Detection and Diagnosis of Breast Cancer [HighRex], EU project contract no. 037642) and the German Federal Office for Radiation Protection (BfS, Bundesamt für Strahlenschutz).

Prof. Dr. Hense manages third-party funding of the German Federal Office for Radiation Protection (BfS, Bundesamt für Strahlenschutz) for research projects into breast cancer screening.

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