

Letter to the editor

Whither breast imaging in SA

The Opinion titled "Whither breast imaging in SA"¹ mentioned a number of important aspects. We would like to expand on them, as well as share some additional ideas.

It is heartening to know that mammography is being taken seriously and with the necessary dedication it deserves. Mammography has long been a neglected part of radiology and that sadly has done mammography serious damage.

We agree that it is impossible to do mammography justice without dedicated equipment and a trained and enthusiastic team. A standard of excellence is more easily achievable with a dedicated team under the supervision of a dedicated Radiologist. The author mentioned the need for a dedicated Radiographer but we would also like to include a Medical Physicist who takes care of the technical and physics aspects. The Medical Physicist will ensure optimum image quality at the lowest possible average glandular dose². As the benefit of mammography must outweigh the risk, this factor is of utmost importance. This is also the reason why the support of a Medical Physicist is compulsory in countries where mammography screening is in place.

Quality Control (QC) programmes are well documented but the task lies in implementing these QC programmes effectively in this country. When approaching a mammography screening programme, the absolute importance of this aspect is overwhelming. We would like to suggest that peer review of the quality of phantom images be included in a QC programme for mammography screening.

Our experience of the implementation of a team approach and peer review resulted in an improvement in clinical image quality. This improvement is demonstrated in Figures 1 and 2. Figure 1 was taken two to three months after the commissioning of a state of the art mammography system and an extended dedicated film processing system. Figure 2 was taken six months after Figure 1 and after implementation of suggestions by the dedicated QC team and peer review.

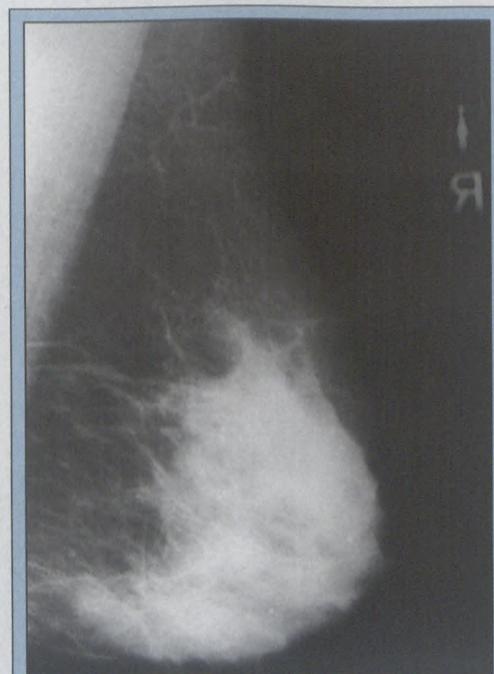


Figure 1: Mammogram acquired on mammography system two months after commissioning.

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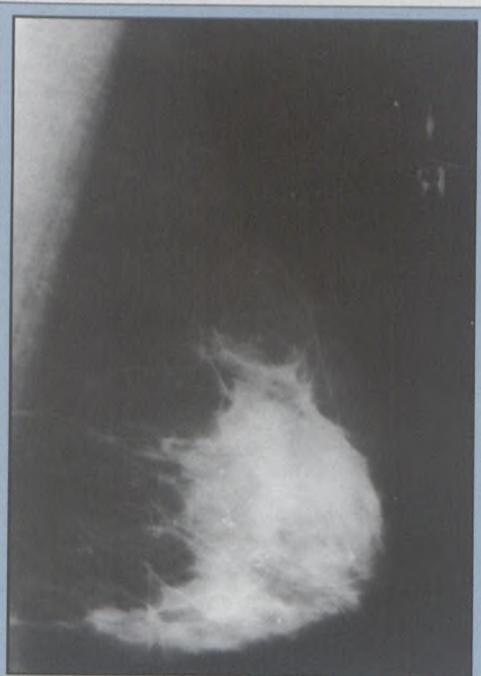


Figure 2: This mammogram, of the same patient as in Figure 1, only six months later and after implementation of suggestions by the dedicated Quality Control team and peer review.

A few additional comments in connection with procedures:

- Ultrasound is a very important part of the breast examination
 - It is the modality of choice in patients under the age of 30 years
 - Approximately 90% of all invasive biopsies and fine needle aspirations are carried out under sonar guidance
 - It often allows definitive diagnosis when there is uncertainty concerning the mammogram and palpation
- A dedicated viewing box is essential. If light shielding devices are not available and ambient light is present a viewer can be used to great advantage. We now manufacture these viewers which can be obtained from us at an inexpensive charge.

• In the literature it is the Radiologist using mammography, fine needle aspiration and core biopsies under ultrasound and stereotactic control that is very prominent in the diagnostic work-up of the patient with breast pathology. Preoperative diagnosis has lead to a decrease in invasive surgical procedures on benign pathology. In South Africa it is up to us to prove to the surgeon and to the patient that it is the Radiologist who should be making this preoperative diagnosis.

We would like to propose a mammography forum that

1. Sets up procedures and protocols
2. Insists on Quality Assurance
3. Provides training in interventional procedures (fine needle aspirations and biopsies)

Let us set a uniform standard for mammography in South Africa. The Department of Health is busy moving in this direction. However it would be best if the initiative remains in our hands.

Your comments and suggestions would be most welcome.

Chris Markgraaf

Consultant Radiologist
Department of Radiology,
Universitas Hospital, Bloemfontein

Ann Sweetlove

Principal Medical Physicist
Department of Biophysics,
UFS, Bloemfontein

References

1. Movson JJ. Whither breast imaging in South Africa. *South African Journal of Radiology*. 1996; 1(4): 4-6.
2. American College of Radiology. Committee on quality Assurance in Mammography. *Mammography quality Control Manual*. 1994; Revised Edition: 43-52.

COMPANY NEWS

PHILIPS

Philips introduces 1.5 Tesla mobile MR system in Europe

PHILIPS MEDICAL SYSTEMS recently delivered Europe's first high-field mobile magnetic resonance imaging system to the Cobalt Unit Appeal Fund in England, a charity that specializes in medical services and in particular the prevention and treatment of cancer.

Delivered in December 1996, the Philips Gyroscan ACS-NT 1.5 Tesla Mobile enables the medical organization to provide high quality imaging to patients in hospitals in the areas served by the charity. The short magnet, wide bore and flared ends of the Philips systems ensure high patient acceptance and reduce claustrophobic reaction. The fast scanning sequences, superb image quality and good patient throughput are important considerations.

Installed in a 24-ton trailer, the Gyroscan NT Mobile system has the same compact magnet with an open, patient-friendly design as its stationary counterpart. In addition, it offers the same functionality and high performance, including gradient spin echo (GRASE), echo planar imaging (EPI) and 1024 acquisition. The low weight of the NT system (which uses a 3 100 kg magnet versus a conventional 7 to 8 000 kg magnet) and the limited need for magnetic shielding, leads to reduced fuel costs and less wear on the tractor and trailer.

Information from Philips Medical Systems, The Netherlands.

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