

<https://doi.org/10.29289/259453942022V32S1043>

## 485 - IMPACT OF A SHORT TRAINING PROGRAM IN MAMMOGRAPHIC POSITIONING IN THE CLINICAL QUALITY OF THE EXAMINATION

Tereza Cristina Ferreira de Oliveira<sup>1</sup>, Henrique Lima Couto<sup>1</sup>, Nayara Carvalho de Sá<sup>1</sup>, Roberta Nogueira Furtado Ferreira<sup>2</sup>, Larissa Barbosa Oliveira<sup>1</sup>

<sup>1</sup>Redimama-Redimasto Centro de Referência no Diagnóstico Mamário – Belo Horizonte (MG), Brazil.

<sup>2</sup>Fundação Hospitalar do Estado de Minas Gerais, Hospital Alberto Cavalcanti – Belo Horizonte (MG), Brazil.

**Introduction:** Breast cancer is the most common malignancy in women worldwide, with the exception of nonmelanoma skin tumors. The initial stage of breast cancer is one of the main predictors of survival. Mammographic screening is the most effective method for an early detection of breast cancer and premalignant lesions, with an impact on reducing mortality, considering that correct positioning during the examination is a critical factor for its quality. **Methods:** A case-control study of a mammography positioning training program (MMG) in a private center specialized in breast diagnosis. In total, 200 incidences were evaluated in 50 examinations performed by two experienced techniques, 25 examinations each. Performance criteria were evaluated in the mediolateral oblique (MLO) and craniocaudal (CC) views. In the CC, well-demonstrated lateral quadrants (QLAT), visualization of the pectoral muscle (MP), centralized nipples (MC), well-demonstrated medial quadrants (QMED), absence of pleats or folds, centralized nipples, and symmetrical breasts were considered as adequate positioning. Buck's low positioning was considered an error criterion. In the MLO assessment, the criteria for adequate positioning were the inframammary angles (AI) visualized, nipples profiled and at the height of the MP, symmetrical breasts, absence of pleats and folds, and symmetrical MP. Pending breasts and pectoralis minor (PP) visualization were considered positioning failures. An 11-h theoretical-practical training was applied: 7 h of practice and 4 h of theory; new tests were performed and the quality criteria were reassessed. **Results:** Positioning errors were significantly decreased after the training. Errors in the CC incidence decreased from 39% to 11% and in the MLO from 36% to 13%. After the training, the following improved criteria were evaluated in CC: QLAT well shown rose from 50% to 94%, MP visualization rose from 21% to 62%, MC rose from 49% to 79%, QMED well shown rose from 45% to 100%, absence of pleats or folds rose from 74% to 88%, profiled nipples rose from 91% to 95%, and symmetrical breasts rose from 86% to 98%. Buck's low positioning dropped from 19% to 0%. In the MLO incidence, the criteria that improved were: AI visualization rose from 45% to 82%, profiled nipples rose from 93% to 95%, nipples at MP height rose from 24% to 84%, absence of pleats or folds rose from 39% to 70%, symmetrical breasts rose from 90% to 100%, symmetrical MP rose from 56% to 82%, symmetrical nipples rose from 72% to 86%, and PP visualization dropped from 13% to 7%. **Conclusion:** The MMG positioning training program improved examination quality. It acts on a vulnerable part, which is human error. The result indicates that a simple, low-cost intervention with low technological complexity can significantly impact the quality of MMG and screening programs in our country.

**Keywords:** mammography; breast neoplasms; patient positioning.