# BREAST CANCER AND THE HISTOPATHOLOGIC TYPE CASE STUDIES

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**Abstract.** The early detection of breast neoplasia, using mammography as a screening method, is important because it is capable to change the natural progression of the disease and it allows the conservative surgery, leading to a decrease of the mortality by breast cancer. There are 3 study cases presented here, women aged 48, 56 and 64 years old respectively, diagnosed with breast cancer by mammography in "Elena Doamna" Clinical Hospital of Obstetrics Gynecology Iaşi. The diagnostic was confirmed anatomo-pathologically. Invasive ductal carcinoma can be found in all ages; invasive lobular carcinoma shows an increase in the incidence over the age of 55, and carcinomatous mastitis is frequent for the patients over 60 years old. Here are the main risk factors for breast neoplasia: obesity, late menopause, lack of breast-feeding, early menarche and breast neoplasia in the family history. Radical surgical treatment is a first-line therapy, the post-operatory evolution being favourable regardless of age.

### INTRODUCTION

Breast cancer represents the most frequent neoplasia for women. Age is one of the most important risk factors for breast cancer. The risk of developing breast cancer is less than 0.5% for a woman under 40 years old, but this risk is over 20 times higher for women over 60 years old (Cobbs et al 1998, Johnston et al 1998, Wallis 1998).

The early detection of breast neoplasia by using the mammography as a screening method would reduce the stage of breast neoplasia considerably in the moment of its diagnosing. Mortality by breast cancer 10 years after the diagnostic was set would be reduced with 25-30%. Unfortunately, even in the developed countries, screening by mammography in breast cancer is poor for the elderly. In USA over 50% of the women aged over 60 years old have never had a mammography (Faulk et al 1995, Tabar et al 2002).

Mammography, as a unique exploratory screening method, cannot diagnose about 10-15% of breast cancers (Nystrom et al 2002, Olsen et al 2001, Vartej et al 2001).

The American Geriatric Association recommends mammography and the clinical examination of the breast as screening methods that have to be performed every year up to the age of 75; after this age it is recommended that mammography should be performed every 2 years, and the clinical examination of the breast every year (Am Ger Soc 2002, Balducci et al 2004).

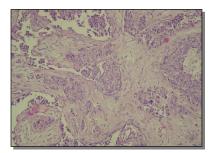
The objective of this study was to determine breast cancer is the main oncologic cause of death for the feminine gender. The early detection of breast neoplasia, using mammography as a screening method, is important because it is capable to change the natural progression of the disease and it allows the conservative surgery, leading to a decrease of the mortality by breast cancer.

### MATERIAL AND METHODS

After we had studied the cases from "Elena Doamna" Clinical Hospital of Obstetrics Gynecology Iaşi, in the period of time between 2012 and 2013, we chose 3 patients aged 48, 56 and 64 respectively. They had been diagnosed with breast cancer after having a mammography followed by the histo-pathologic examination of the resected sample, so they could be presented as case studies for the malignant pathology of the breast. The surgical treatment of the breast neoplasia has the same indications, regardless of the patient's age, but the doctors have to be extremely careful with the existent comorbidities when it comes to geriatric age (cardiovascular, respiratory, metabolic problems etc).

Surgical treatment of first choice is preferred to the hormone treatment that used to be recommended for the women over 60 years old with breast tumours that are still in surgical stage, with positive hormone receptors (Costachescu et al 2007).

#### RESULTS



Case 1. Invasive ductal carcinoma. (Collection of "Elena Doamna" Hospital Iaşi - Anatomopathologic Laboratory)

Female F.B. aged 48, coming from the countryside

Associated pathology: stadium III high blood pressure and type 2 diabetes

Risk factors: IIIrd grade obesity, early menarche Heredocolateral history: mother – breast neoplasia

Hormone treatment: estrogen-progestogen on a period of time longer than 5 years

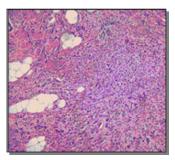
Surgical treatment: Pattey modified radical mastectomy - with axillary lymphadenectomy will be performed.

Post-operatory complications: subcutaneous hematoma that did not require another surgical procedure and fluid and electrolyte imbalance.

Days of hospitalization: 14

Chemotherapy: in the absence of major contraindications, chemotherapy is well tolerated, the incidence of acute complications (alopecia, nausea, vomiting) being low.

Evolution: favourable after 6 months.



Case 2. Invasive lobular carcinoma. (Collection of "Elena Doamna" Hospital Iași - Anatomopathologic Laboratory)

Female A.M. aged 56, coming from the countryside Associated pathology: atrophic cervicitis - vaginitis

Risk factors: IInd degree obesity, early menarche, nulliparous

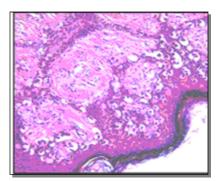
Hormone treatment: estrogenic derivatives on a period of time of 3 years

Surgical treatment: Madden radical mastectomy with axillary lymphadenectomy will be performed.

Post-operatory complications: discrete lymphedema of the arm

Days of hospitalization: 14

Evolution: favourable after 6 months.



Case 3. Carcinomatous mastitis.
(Collection of "Elena Doamna" Hospital Iaşi - Anatomopathologic Laboratory)

Female T.C. aged 64, coming from the urban area

Associated pathology: high blood pressure, cervico-vaginal inflammatory pathology, varicose legs.

Risk factors: lack of breast-feeding, late menopause

Surgical treatment: apply simple cleaning mastectomy.

Post-operatory complications: labile hypertension appeared 3 days after the surgery and d

fluid and electrolyte imbalance

Days of hospitalization: 11

Evolution: favourable when leaving the hospital.

## DISCUSSIONS

Invasive ductal carcinoma is the most common breast cancer – about 80% of the total breast cancers. It invades the skin and spreads towards the lymph nodes. It is sometimes called infiltrating ductal carcinoma; the term"invasive" shows the fact that cancer cells have spread in the breast tissues around.

Invasive lobular carcinoma, also called infiltrating lobular carcinoma, is the second on the list of the most widely spread types of cancer, after the invasive ductal carcinoma. Although the invasive lobular carcinoma can affect women of any age, it is most often met in older women. According to the American Cancer Society, about two thirds of the women diagnosed with this type of cancer are over 55 years old. some studies suggested that the use of hormone replacement therapy during or after menopause can increase the risk of developing invasive lobular carcinoma (Am Ger Soc 2002, Balducci 2004, Miron et al 2012).

Cervico-vaginal inflammatory pathology appeared on an atrophic background and also cardio-vascular diseases are the most frequent pathologies that are associated with breast cancer that appears over the age of 55 (Miron et al 2012).

Obesity, as a risk factor for most gynecological neoplasias, is frequently associated with breast pathology. Obesity is associated with an increase of mortality and morbidity, in general, for older

women with a body mass index over 29 kg/m², and the risk of developing breast cancer increases with 20-40% for these women. The mechanism by which obesity increases the risk of breast neoplasia is the increase in the storage of adipose tissue estrogen precursors (Balducci 2004, Muss et al 2004).

The prognostic for the patients with breast cancer who received hormone replacement therapy is good. The explanation consists in the fact that this therapy causes the appearance of some forms that are highly differentiated histologically, with a net response that is more favourable to therapy than the forms with a low degree of differentiation (Balducci 2004, Chlebowski et al 2003).

The decompensation of pre-existing medical pathology, especially the cardiovascular diseases, is more frequent in for older patients and needs complex clinical evaluations and an intensive and early treatment (Costachescu et al 2007).

### CONCLUSIONS

Breast cancer represents the most frequent malignant condition for the women in the developed countries and it is the second cause of mortality for the women over 60 years old.

Surgical treatment, when there are no other severe co-morbidities and when the stage of the disease allows it, remains the main therapeutic sequence, as the age factor does not forbid its application.

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