

**LOCALLY ADVANCED BREAST CANCER: FOCUS ON DIAGNOSIS,
THERAPEUTIC STRATEGIES AND HEALTH CARE PRACTICES**

Charles Elias Assmann (presenter)¹
Beatriz da Silva Rosa Bonadiman²
Francine Carla Cadoná³
Ivana Beatrice Mânica da Cruz⁴

Thematic Subject: Health care knowledge and practices

Abstract: Objective: The aim of this study was to address some aspects of locally advanced breast cancer (LABC), such as diagnosis, therapeutic approaches and health care practices related to patients. **Method:** A review was performed based on the search of literature data published in the Pubmed/Medline database in the last 10 years to assess parameters regarding diagnosis and treatment approaches related to LABC. **Results:** Several diagnostic procedures are employed for the clinical confirmation of LABC. Breast tissue biopsy is the most precise method to diagnose tumor development, however, breast biopsy is an aggressive procedure. Therefore, other approaches may be necessary. Conventional methods, such as mammography and ultrasonography can also be used, although high mammary tissue density offers a challenge for breast evaluation. In the specific case of LABC, magnetic resonance imaging (MRI) suits better to reveal LABC extension and staging of tumor than mammography and ultrasonography, and therefore is frequently used for LABC diagnosis. When it comes to LABC treatment, all offered procedures are performed to control disease locoregionally and to eliminate distant metastasis. In this context, some of the methods employed for LABC and breast cancer treatment, in general, include surgery, radiotherapy, chemotherapy and

¹ Msc, Federal University of Santa Maria, charles.ufsm@gmail.com

² Msc, Federal University of Santa Maria, beadasilvarosa@gmail.com

³ PhD, University of the West of Santa Catarina, fran.cine.bio@hotmail.com

⁴ PhD, Federal University of Santa Maria, ibmcruz@hotmail.com

immunotherapy. There are no standard therapeutic procedures for LABC patients' management, due to the many aspects that should be taking into account to choose an appropriate treatment, such as lymph node invasion, tumor size and local extension, and expression of estrogen and progesterone receptors, for example. Moreover, LABC treatment represents a great task after diagnosis because there is a high risk of metastasis at this stage, also known as breast cancer stage III. One possibility is to submit the patient to a complete breast removal, called mastectomy. Also, chemotherapy and radiotherapy are also potentially used as therapeutic procedures for breast cancer and LABC management. More recently, immunotherapy has arrived as a complementary technique. Ideally, the treatment strategy of choice should take into account patient characteristics, making it more personalized. Although there are many strategies employed for the treatment of LABC and breast cancer, patients still deal with a lot of side effects such as pharmacological resistance, metastasis, nausea, vomiting, fatigue, psychological complications, among others. Especially in the case of LABC, the development of lesions and wounds due to tumor progression, extensive involvement of the lymph node system and development of metastasis result in poor prognosis and low survival rates. Also, LABC progression does not have effective topical or palliative treatment for skin lesions and wounds and conventional treatment are still not effective and have various side effects. **Conclusion:** In summary, the results presented here indicate that there are a lot of efforts in terms of LABC and breast cancer diagnosis and treatment. Nevertheless, patients still present a lot of side effects due to treatment management, especially in the advanced cases, with the occurrence of metastasis. In this sense, many health care practices are still needed to improve patient's survival rates and quality of life.

Keywords: Breast cancer; Locally advanced breast cancer; Diagnosis; Therapeutics; Health care.