

# MASTALGIA - LITERATURE REVIEW

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## ABSTRACT

Mastalgia (Breast Pain) is responsible for 60% to 70% of consultations in the daily routine of a mastologist's office. It can be classified into cyclic and acyclic. The diagnosis is clinical. Mammography and ultrasound exams should be ordered according to the patient's age and physical examination findings. Non-drug treatment with behavioral measures provides relief in 80% of patients. Non-steroidal anti-inflammatory drugs and tamoxifen should be used in cases of severe symptoms.

**KEYWORDS: MASTALGIA, MASTODYNIA, BREAST PAIN.**

## INTRODUCTION

Mastalgia, mastodynia or breast pain is the reason for 60% to 70% of consultations in mastology.<sup>1</sup>

It is characterized as any painful condition in the topography of the breast, being more common in menacme and tends to decrease with menopause, showing close interaction with the menstrual cycle.<sup>2</sup>

Although the correlation with breast cancer is very small, mastalgia is a cause of anguish and anxiety, and can affect quality of life. Thus, carcinophobia is one of the main reasons why the patient seeks the mastologist.

Finally, about 70% of women have mastalgia throughout their lives, being severe in 10 to 20% of them.<sup>1</sup>

## LITERATURE REVIEW

### Classification

Mastalgia can be cyclic, acyclic and extramammary pain. Cyclic mastalgia is related to the menstrual cycle and benign functional changes in the breast (BBC – Benign Breast Conditions).<sup>3</sup> Pain is diffuse and bilateral, varying throughout the menstrual cycle, intensifying in the last week of the cycle, and improving after menstruation. The intensity of pain can be mild, moderate or severe (Table 1).<sup>1</sup>

In acyclic mastalgia, there is no association with the menstrual cycle, being frequently localized and unilateral, usually caused by cysts, mastitis, trauma, superficial thrombophlebitis (Mondor's disease) and diabetic mastopathy.<sup>3</sup>

Extramammary pain is characterized by referred pain due to affections in other structures that anatomically relate to the breasts.<sup>3</sup> Thus, the pain originates outside the

breast, such as costochondritis (Tietze syndrome), neuropathy, trauma and rib fractures. Other causes such as heart disease, gastritis and liver disease may be related to pain in the breast region.<sup>3</sup>

CLASSIFICATION AS TO THE INTENSITY OF PAIN	PSYCHOSOCIAL FEATURES	TREATMENT
Mild	It does not interfere with the quality of life.	Non-drug treatment with guidance on the physiology of mastalgia.
Moderate	It interferes with quality of life, but not with usual activities.	Non-drug treatment with guidance on the physiological mechanisms of pain.
Severe	It interferes with daily activities and quality of life.	Non-steroidal anti-inflammatory drug for a short period or tamoxifen, at a dose of 10 mg/day for 3 months.

**Table 1 - Mastalgia. Classification, characteristics and treatment.**

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## DIAGNOSIS

The diagnosis of mastalgia is made by anamnesis and detailed physical examination, the first step being the differentiation between pain originating in the chest wall and breast pain. In the anamnesis, the patient's lifestyle, use of hormonal and non-hormonal medication, work and sports activities, history of trauma, presence of musculoskeletal diseases and psychosocial problems, as well as family history for breast cancer should be assessed.<sup>4</sup>

## COMPLEMENTARY EXAMS

Mammography and ultrasound should be requested in cases of physical examination findings (nodules, suspected papillary effusion and skin changes), especially in patients over 40, family history of breast cancer or if there is any doubt in the physical examination.<sup>5</sup>

## TREATMENT

Non-drug treatment, which is based on guidance on the physiological mechanisms of breast pain, promotes symptom relief in about 80% of patients (Table 1). Its overriding principle is to listen and reassure the patient.<sup>3</sup> Behavioral measures such as physical activity, a low-lipid diet, weight reduction, anxiety control, abolishing smoking and other habits are important.<sup>2</sup>

The use of a correct size bra, with adequate support, has good results in pain relief. In addition, the use of tight bras or metal rods should be avoided, as they compress the chest or the ribs.<sup>2</sup>

The initial drug treatment can be done with non-steroidal anti-inflammatory drugs for a period of three to five days, especially in cases of musculoskeletal pain that radiate to the breasts. Tamoxifen can be used at a dose of 10 mg/day, for three months, in cases of severe mastalgia.<sup>6</sup>

Other drugs such as gamma linoleic acid, evening primrose oil, vitamin E, and diuretics have no scientific evidence of effectiveness.<sup>7</sup> In addition, drugs, such as bromoergocriptine, lisuride, danazol, GnRH analogs, are cited in the literature as effective in the treatment of mastalgia, however, due to their side effects, they are in disuse in the medical practice.<sup>6</sup>

## CONCLUSION

Mastalgia is the most common complaint in the daily routine of a mastologist. It is often motivated by carcinophobia, since it generates a lot of anxiety in the patient. However, the patient should not be overlooked, but should be properly reassured.

There is a consensus in the literature that the most efficient measures for mastalgia are general guidelines and behavioral measures, as they improve 80% of cases.

When these measures are not sufficient, the use of non-steroidal anti-inflammatory drugs in patients with localized pain is considered the first-line treatment and tamoxifen can be used in refractory cases.

Gamalinoleic acid, evening primrose oil, vitamin E and diuretics do not have scientific proof of effectiveness in the

treatment of mastalgia, however, they are widely used in clinical practice.

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