

Management sequence for moderate to severe cyclical mastalgia affecting quality of life

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Abstract

Cyclical mastalgia most common type of breast pain , accounting for 40 percent of all cases referred to breast clinic . there important correlation with the menstrual cycle with this type of mastalgia . the aim of study to detect cyclical mastalgia respond to reassurance with recommendations or respond to medical treatment on the one hand and study effectiveness and side effects of medical treatment of cyclical mastalgia on the other hand . the study including 147 female patients with cyclical mastalgia affecting quality of life attending Afak hospital and private clinic between August 2014 _ August 2021 Data recorded on database, history , clinical examination and investigated by radio - image (mammography or ultrasound) then managed at first with reassurance with recommendations and if patients not respond to reassurance then treated with either evening primrose oil or Cabergoline drug as result (40 %) of patient respond to reassurance with recommendations the remainder (60 %) divided into two groups , one group treated with evening primrose oil the response for such drug was (66 %) and side effect of same drug develop in (4 %) of patients. While another group treated with Cabergoline , the response to this drug was (88%) and side effect develop in (89 %) of patients . conclusion , cyclical mastalgia common condition affecting quality of life needs carefull assessment to avoid missed breast carcinoma and may require medical treatment .

Key words : cyclical mastalgia ; Carbergoline ; evening primrose oil ; reassurance.

Introduction

Mastalgia is a medical term used for breast pain, one of the most common complaints among women of 15 to 40 years of age (Tahir MT. 2022). Such pain is fairly common, with up to 70% of women seeing a healthcare their reproductive lives suffer from this condition and seek medical help.(Eren T. 2016, Olawaiye A. 2005 , Smith RL. 2004, Mohammed AA .2020).

Cyclical mastalgia most common type of breast pain, there is an important correlation with the menstrual cycle (Grullon s. 2022 , Smith RL. 2004, Mohammed AA .2020) with discomfort lasting for a varying period of time before menstruation. Because of this cyclical relation, mastalgia is generally a condition of premenopausal women, The exact etiology of mastalgia remains undefined (Smith RL. 2004) but hormonal changes an important factor, Some studies claim that anxiety, stress, and depression are contributing factors, while a few others mention that caffeinated drinks, fatty diet, and smoking also play a major role in its development (Goodwin PJ.1998) with a median presenting age of about 35 years.

Characteristically, the features of cyclical mastalgia wax and wane. Episodes of discomfort may last for some months; there may then be years of freedom until symptoms begin again. The pain of cyclical mastalgia is frequently, but not always, bilateral and is usually located in the upper outer quadrants. It is poorly localized and may radiate across the chest wall into the axilla or down the inside of the arm (Salzman b.2012). The breasts are frequently described as being 'heavy' as if pregnant, and many patients describe marked nodularity at the time of the discomfort. There is a wide spectrum of symptoms in cyclical mastalgia. The majority of patients have only mild discomfort lasting 2 or 3 days before menstruation and are not unduly concerned. Such individuals are therefore best classified as having a breast 'disorder' (ANDI) rather than a disease. The small minority who have severe symptoms lasting throughout the cycle with relief only during menstruation are those to whom the term 'disease' may be applied. There are no mammographic or pathological characteristics of cyclical mastalgia: indeed this lack of correlation between clinical, radiological, and histological findings is one of the major .

The important thing in management of mastalgia to exclude breast carcinoma by clinical examination and Ultrasonography is being used in patients age less than 35 years because of dense breast tissue: (Jokich PM. 2017, Harper AP.1981) and Female more than 35-year of age should undergo mammography if a physical examination detects a focal area of pain with an unusual thickening or a breast lump (Holbrook AI. 2020, Howard MB.2012) . most of cyclical mastalgia (70%) relieved by reassurance (Iddon J.2013) , conservative management like using well-fitting sports bra (Ngô C. 2015, Ngô C. 2000) and dietary modification ; reducing the intake of tea and coffee (Russell LC. 1989).

Aims of study

- 1 - Determine management sequence of cyclical mastalgia
- 2 - Determine drugs effectiveness of evening primrose oil and Cabergoline in treatment of cyclical mastalgia
- 3 - Determine adverse effects of drugs used management of cyclical mastalgia

Patient And Method

This prospective study of female patients with moderate – severe cyclical mastalgia (affecting quality of life) attending out-patient surgical unit of Afak hospital and private clinic between August 2014 and August 2021 on 147 female patient of age group (20 – 42) years old . History , examination and ultrasound or mammography were carried out for all patients to exclude presence of benign breast disease and occult carcinoma . All patients were managed by reassurance and recommendations (avoid caffeine , wear hard bra at day , wear soft bra at night and chart pain for follow up pain relief at mense) , Patients that not respond for such approach of management were divided into two groups , First group was treated with Evening primrose oil , Second group was treated with Cabergoline and follow up patient for two months to assess patients response for treatment and looking for appearance of any drug adverse effects on patients . Number of patients in first group were not responded to Evening primrose oil then treated with Cabergoline , also followed up for two months.

Results

147 patients who were diagnosed as (moderate _ severe) cyclical mastalgia affecting quality of life included in this study . All patients were managed by reassurance and recommendations (avoid caffeine , wear hard bra at day , soft

bra at night and pain chart follow up) and the result was (54) patients well respond while (4) patients accepted response and (89) patients not respond and the response rate mentioned in table(1).

Number of patients	Type of response
37% (54) patients	Well respond
3% (4) patients	Accepted respond
60 % (89) patients	Not respond

Table (1) incidence of patients response to reassurance with recommendations

Among (89) patients who not respond for reassurance and recommendations, these (89) patients divided into two groups

- 1- group A :- (47) patients were treated with evening primrose oil .
- 2- group B:- (42) patients were treated with cabergoline .

The result among group (A) as mentioned in the table (2) .

Number of patients	Type of response
(19 patients) 40 %	Well respond
(12 patients) 26 %	Accepted respond
(16 patients) 34 %	Not respond

Table (2) incidence of patients response to evening primrose oil that not respond to reassurance

Among group(B) the results as mentioned in table (3)

(28 patients) 67%	Well respond
(9 patients) 21 %	Accepted respond
(5 patients) 12 %	Not respond

Table (3) incidence of patients response to cabergoline that not respond to reassurance

Regarding side effects of each drug used in study :

Group (A) that use evening primrose oil only 2 patients off (47) patients develop nausea as side effect of this drug as in table(4).

number of patient	Side effect of evening primrose
4 % (2 patient)	Nausea

Table (4) incidence of side effect of evening primrose oil on group A

Among group B the side effects of cabergoline occur in 36 patients as mentioned in table (5)

Number of patients	Side effect of cabergoline
36 patients (86) %	Dizziness , nausea and headache

Table (5) incidence of side effect of cabergoline on group B

Regarding patients in group (A) not respond to treatment with evening primrose oil were 16 patients (34 %) then treat with cabergoline and results were as mentioned in table(6)

Number of patients	Response
(10 patients) 62 %	Well respond
(4 patients) 25 %	Accepted response
(2 patients) 13 %	Not respond

Table (6) incidence of patients not respond to evening primrose oil and respond to cabergoline

There are 5 patients (12 %) of group (B) not respond to cabergoline then treated with evening primrose oil and the results were no one of the them respond to evening primrose oil .

Discussion

More than half of our patients with moderate to severe cyclical mastalgia not respond to reassurance . while in study done by Alfred carlos S.D Barros AC , was 70.8 % of moderate mastalgia and 52.3 % of severe mastalgia respond to reassurance respectively (Barros AC 1999) and in another study most of cyclical mastalgia (70%) relieved by reassurance (Iddon J 2013)

In our study response rate of cyclical mastalgia to evening primrose oil was 66 % and comparative to another study (Parveen s. 2007) while in other studies were 45 % (Mohammed, K.M. 2010, Pye JK 1985), and in study done by Mohaddese mohboubi the response rate to evening primrose oil was 97% (Mahboubi M. 2019, Cheung KL.1999).

In our study response rate of cyclical mastalgia to Cabergoline was (88%) it was comparative to study done by Yavuz Aydin it was 86.4% (Yavus Aydin 2010) .

In our study observed 4 % of patients treated with evening primrose oil were develop nausea as side effect while in other studies the percent of patients develop side effect to evening primrose oil were 5,7% (Mohammed,K.M. 2010) and 12 % in other studies (Parveen s. 2007 , Mahboubi M. 2019).

In our study Cabergoline side effect was observed in 86 % of patients treated with Cabergoline while in another study the adverse effect of cabergoline were recorded in 68 % of patients (Jonathan Webster 1994).

Recommendations

1- because of lack of reliability of clinical criteria of early breast carcinoma so that any case of mastalgia should carefully assessed.

2- cyclical mastalgia can be treated without use of drugs for that any case of cyclical mastalgia better treated at first with reassurance with recommendations .

3- cases of cyclical mastalgia not respond to reassurance better treated with evening primrose oil at first because large number of patients respond well to this drug with minimal side effect .

4- Cabergoline drug has multiple and high percent of side effects is better to remain second choice medical treatment for cyclical mastalgia not respond to reassurance and evening primrose oil.

Conclusion

From this study we have found the cyclical mastalgia is a common condition affect quality of life and may be treated without drugs and on the other hand may necessitate medical treatment . Every patient with cyclical mastalgia should be carefully assessed to avoid missed breast carcinoma.

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