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Role of Danazole and Primrose Oil in Mastalgia

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ABSTRACT

Objective: This study was conducted to evaluate role of danazole and primrose oil in the treatment of mastalgia.**Study design:** It is a prospective type comparative study.**Duration and Setting:** This study was done in Gynae unit of Bahawal Victoria Hospital Bahawalpur in the duration of six months from July 2017 to December 2017.**Patients and Methods:** One hundred and forty patients were included in this study which presented in out-patient door of Gynae and obs. These patients presented with the complaint of breast pain.Age of patients ranges from 15-60 years with mean age of 35.8 years. Mostly females with age above 25 years were having this complaint. They were divided into two groups each consisted on 70 cases. Group –A was given Danazole treatment and Group-B was given Primrose oil treatment for breast pain for three months duration and they were called for follow up after 3 months for prognosis. A proforma was designed containing all necessary questions related to patient's age, duration of complaint, and any side effect noticed after given treatment was documented for each individual patient. Response of treatment was asked either excellent, good, poor or no response and documented for both groups. Results of both groups were calculated in the form of frequencies and compared with each other and presented in the form of tables and charts. Consent from patients was taken for including them in study and also from medical superintendant for conducting study in the hospital.**Results:** There were 140 cases divided into two groups A and B each with 70 cases. Their age range was 15-60 years. There were 25 cases with age 15-20 years, 20 with 21-25 years, 33 with 26-30 years, 28 cases lying in age group of 31-35 years and 18 cases were having age above 40 years. On Follow-up after 3 months each patient was asked about effect of treatment. Twenty eight patients from group-A having treatment with danazol respond excellent to it, 25 showed good response, 10 showed poor response while 7 cases showed no response. From group-B using primrose oil, 21 cases showed excellent response, 30 cases showed good response, 8 cases with poor response while 11 cases showed no response. Various side effects were noted in both groups. From group-A 12.8% and from group-B 15.7% showed side effects.**Conclusion:** Mastalgia is a very common problem among female population and it can be treated very effectively using danazol for at least 3 months duration. It has few side effects but overall it is very effective in treating breast pain.**Key Words:** Mastalgia, Danazol, Primrose oil, Side effects

INTRODUCTION

Mastalgia is a very common problem among females of Asian countries. Due to lack of proper treatment and misdiagnosis or late diagnosis it leads to mental stress and financial burden as well.^{1,2} Long duration of disease in women causes emotional instability in them. There is misbelieving in our society among uneducated females specially that breast pain is a sign of breast cancer which creates fear among. Most of the females don't consult any physician for this problem and take some home remedy which often proves to be useless and then they present to any doctor after a long time.⁴ Mastalgia is of three types cyclical, continuous or extra mammary. Cyclical type is related to hormones and occurs during menstrual cycle each month While non cyclical or continuous is not related to hormones.^{5,6} Such patients with breast pain require to be examined properly and a detailed history should be taken from them followed by necessary investigations for evaluating other reasons of breast pain.⁷ Most of the times women recover without any treatment, while some of them need it. Use of primrose oil is very common in this condition which is much effective. Another treatment option is danazol which has been proved very effective in clinical settings. In our study patients were divided into groups A and B. One group was given treatment with primrose oil and other was treated with danazol. Effect of both was observed and response of patients was documented. Patients were asked about the response of treatment in four options excellent, good, and poor or no response. Most of them showed good response with danazol as compared to primrose oil and fewer side effects. Few patients showed no response with both treatments. These cases were prescribed treatment and were called for follow up after 3 months and effect of treatment was asked. Result of both was compared with each other and it was observed that danazol is very



effective. Some of them developed few complications related to treatment such as nausea, vomiting, altered taste and hirsutism. Few developed increase in weight after taking treatment and abdominal bloating. Mostly patients did not have any complication.

PATIENTS AND METHODS

This is a prospective comparative type of study done in gynae unit of Bahawal Victoria Hospital Bahawalpur during a period of six months. One hundred and forty patients were included in this study which presented in out-patient door of Gynae and obs. These patients presented with the complaint of breast pain. Age of patients ranges from 15-60 years with mean age of 35.8 years. Mostly females with age above 25 years were having this complaint. They were divided into two groups each consisted on 70 cases. Group –A was given Danazole treatment and Group-B was given Primrose oil treatment for breast pain for three months duration and they were called for follow up after 3 months for prognosis. A proforma was designed containing all necessary questions related to patient’s age, duration of complaint, and any side effect noticed after given treatment was documented for each individual patient. Response of treatment was asked either excellent, good, poor or no response and documented for both groups. Results of both groups were calculated in the form of frequencies and compared with each other and presented in the form of tables and charts. Consent from patients was taken for including them in study and also from medical superintendant for conducting study in the hospital. Results obtained in this study were compared to previous studies as well. Privacy of patients was made sure. Which patients had other reasons of mastalgia were excluded from this study and they were investigated for any malignancy. Follow up of all patients was done properly. These cases were prescribed treatment and were called for follow up after 3 months and effect of treatment was asked. Result of both was compared with each other and it was observed that danazol is very effective. Some of them developed few complications related to treatment such as nausea and vomiting in 5 cases, altered taste in 2 and hirsutism in 2 cases.

RESULTS

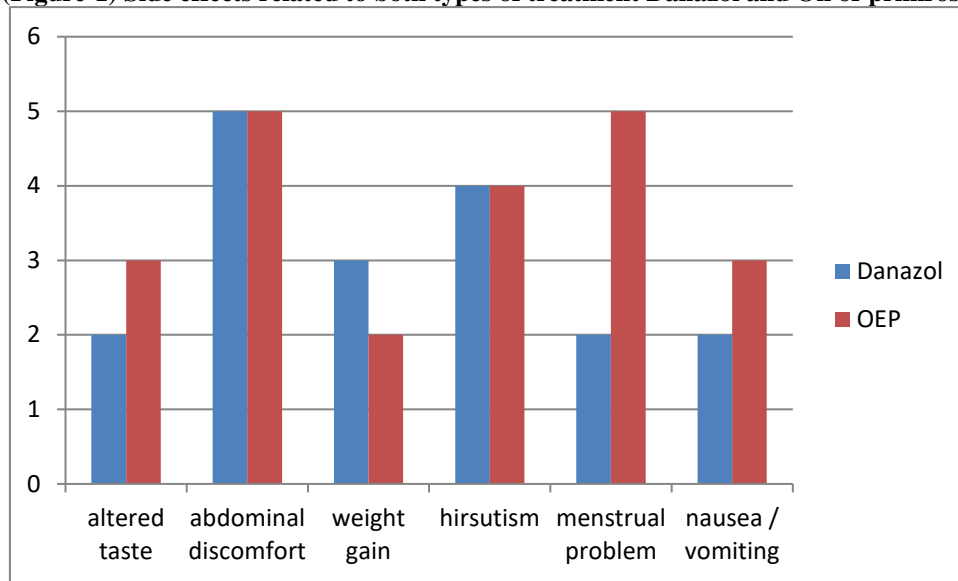
Those cases were selected for study which presented in out-patient doors with the complaint of breast pain. Patients of all ages were included. There were 140 cases divided into two groups A and B each with 70 cases. Their age range was 15-60 years. There were 25 cases with age 15-20 years, 20 with 21-25 years, 33 with 26-30 years, 28 cases lying in age group of 31-35 years and 18 cases were having age above 40 years. On Follow-up after 3 months each patient was asked about effect of treatment. Twenty eight patients from group-A having treatment with danazol respond excellent to it, 25 showed good response, 10 showed poor response while 7 cases showed no response. From group-B using primrose oil, 21 cases showed excellent response, 30 cases showed good response, 8 cases with poor response while 11 cases showed no response. Various side effects were noted in both groups. From group-A 12.8% and from group-B 15.7% showed side effects. Results of both groups were calculated in the form of frequencies and compared with each other and presented in the form of tables and charts. Consent from patients was taken for including them in study and also from medical superintendant for conducting study in the hospital. In group A 40% showed excellent response while from group –B 30% showed excellent response to the treatment. These cases were prescribed treatment and were called for follow up after 3 months and effect of treatment was asked. Result of both was compared with each other and it was observed that danazol is very effective. Some of them developed few complications related to treatment such as nausea and vomiting in 5 cases, altered taste in 2 and hirsutism in 2 cases. Most common side effect observed was nausea and vomiting and on second number menstrual abnormalities.

(Table-1) Response to treatment with Danazol in group-A

Response to treatment	Number of patients	Frequency (%)
Excellent	28	40.00
Good	25	35.7
Poor	10	14.28
No response	7	10.00



(Figure-1) Side effects related to both types of treatment Danazol and Oil of primrose.



(Table-2) Response to treatment with Oil of Evening Primrose in group-B

Response to treatment	Number of patients	Frequency (%)
Excellent	21	30.00
Good	30	42.86
Poor	08	11.43
No response	11	15.7

DISCUSSION

Mastalgia is a very old term known from centuries.^{9,10} Our study was based on role of two treatment modalities of mastalgia. Similar study was done in America over a period of two years based on cyclical mastalgia during menstruation period.^{11,12} Primrose oil is derived from the seeds of primrose plant.¹³ Mastalgia is a very common problem among females of Asian countries. Due to lack of proper treatment and misdiagnosis or late diagnosis it leads to mental stress and financial burden as well. Long duration of disease in women causes emotional instability in them. There is misbelieving in our society among uneducated females specially that breast pain is a sign of breast cancer which creates fear among. Most of the females don't consult any physician for this problem and take some home remedy which often proves to be useless and then they present to any doctor after a long time. Mastalgia is of three types cyclical, continuous or extra mammary.¹⁴ Cyclical type is related to hormones and occurs during menstrual cycle each month While non cyclical or continuous is not related to hormones. Such patients with breast pain require to be examined

properly and a detailed history should be taken from them followed by necessary investigations for evaluating other reasons of breast pain. This is a prospective comparative type of study done in gynae unit of Bahawal Victoria Hospital Bahawalpur during a period of six months. One hundred and forty patients were included in this study which presented in out-patient door of Gynae and obs.¹⁵ These patients presented with the complaint of breast pain. Age of patients ranges from 15-60 years with mean age of 35.8 years. Mostly females with age above 25 years were having this complaint. They were divided into two groups each consisted on 70 cases. Group –A was given Danazole treatment and Group-B was given Primrose oil treatment for breast pain for three months duration and they were called for follow up after 3 months for prognosis. A proforma was designed containing all necessary questions related to patient's age, duration of complaint, and any side effect noticed after given treatment was documented for each individual patient. Response of treatment was asked either excellent, good, poor or no response and documented for both groups. Results of both groups were calculated in the form of frequencies and compared with each other and presented in the form of tables and charts. Another treatment option is danazol which has been proved very effective in clinical settings. In our study patients were divided into groups A and B. One group was given treatment with primrose oil and other was treated with danazol. Effect of both was observed and response of patients was documented. Patients were asked about the response of treatment in four options excellent, good, and poor or no





response. Most of them showed good response with danazol as compared to primrose oil and fewer side effects. Few patients showed no response with both treatments. These cases were prescribed treatment and were called for follow up after 3 months and effect of treatment was asked. Results of both groups were calculated in the form of frequencies and compared with each other and presented in the form of tables and charts. Consent from patients was taken for including them in study and also from medical superintendent for conducting study in the hospital. Results obtained in this study were compared to previous studies as well. Privacy of patients was made sure. Which patients had other reasons of mastalgia were excluded from this study and they were investigated for any malignancy. This disease can be cured early if diagnosis is made in time and patient is treated properly with Danazol

for at least 3 months. Most of the time this option is sufficient but in few cases it does not work then other treatment options are considered.

CONCLUSION

Mastalgia is a very common problem among female population and it can be treated very effectively using danazol for at least 3 months duration with few side effects which are reversible. It has few side effects but overall it is very effective in treating breast pain. Good pain control can also be achieved by using Primrose oil which has minimum side effects and very effective analgesic in this condition. Somehow Danazole is superior to primrose oil in the treatment of mastalgia. Early proper treatment of this disease can reduce stress and social disability of females.

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