Original Article

Frequency of depression in patients with stable angina

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Objective: To determine frequency of depression in patients with stable angina in outpatients department of our institution.

Methodology: This descriptive cross-sectional study was conducted at Cardiology unit, Town Teaching Hospital, Kabir Medical College, Peshawar, Pakistan from Jan 1, 2017 to June 30, 2017. It included 200 patients with stable angina. DSM-5 was used to diagnose depression. Presence or absence of depression in was recorded.

Results: We found that 69.5% with stable angina were suffering from depression. Female were more affected than males. Age range 40-60 years wore more affected.

Conclusion: There is a high frequency of depression in patients with stable angina and clinicians must screen these patients regularly for depression. (Rawal Med J 202;45:534-536).

Keywords: Depression, DSM, angina,

INTRODUCTION

Angina or angina like symptoms are notoriously deceptive in their description by the patient and may also not correlate with the amount of ischemia, thus defying proper intervention or prevention of recurrent ischemia.[1] Thus, depression might alter the pain perception threshold for such patients. It is not feasible to compare studies done in past due to different methods used by past investigators. Presence of depression in patients with stable angina might be associated with the poor symptom control, poor medication compliance and long term complications.[2]

Females younger than 50 years are the usual population suffering from psychosocial comorbidities along with ischemic heart disease. Indeed the effects of stress adversely affect the control of angina and worsen the quality of life of such patients. It is of prime importance to target the ischemia, but not addressing the depression or anxiety may lead to poor response to treatment for each condition alone.[3] These patients undergo a vicious cycle of more anginas and more depression, augmenting the morbidity due to both conditions.

Patients with depression are non compliant with their lifestyle changing advice and medicine.[4] They also have tachycardia at rest because of higher blood catecholamine level. All these lead to worsening of not only the symptoms of angina but also worsening of the disease in their coronaries.[5-7] Our study aims to identify such high risk population, so that early identification might be helpful in devising management strategy for our patients and such screening might be incorporated into regular checkup of the stable angina patient.

METHODOLOGY

After approval of ethical review committee, this descriptive cross-sectional study was conducted at Cardiology outpatients department, Town Teaching Hospital of Kabir Medical College, Peshawar from Jan 1, 2017 to June 30, 2017, with collaboration a FCPS qualified psychiatrist. A total of 200 patients of either gender with stable angina were included in the study, after informed consent. Diagnostic and Statistical Manual of Mental Disorders (DSM–5) was used to diagnose depression and patients already diagnosed and taking treatment for stable angina were included in the study.

Stable angina was defined as a patient under treatment supported with other evidence of myocardial ischemia like positive exercise tolerance test or coronary artery obstruction on angiography or having coronary artery diseases (CAD) equivalent e.g. diabetes and chronic kidney disease.[3] Inclusion criteria of the study was patients of either gender between 20 to 60 years of age with established diagnosis of stable angina. Patients with

anxiety and other psychiatric illness, patients with severe co-morbid illness like renal failure, congestive cardiac failure (CCF), stroke, and acute coronary syndrome (ACS) or patients using benzodiazepines were excluded from the study. They were assessed using the Seattle Angina Questionnaire and patients who fulfill DSM-5 criteria.

Statistical Analysis: Data obtained were collected on a predefined structural Performa and analyzed using IBM SPSS Statistics for Windows, Version 21.0. (IBM Corp., Armonk, NY).

RESULTS

Out of 200 patients, 152(76%) were female and 48(24%) males. Age and gender wise distribution of the sample are shown in Table 1.

Table 1. Age and gender wise distribution of patients.

Characteristics	Frequency	Percentage
Age		
20-30	14	7%
31-40	20	10%
41-50	73	36.5%
51-60	93	46.5%
Gender		
Male	48	24%
Female	152	76%

Table 2. Major depression by age and gender.

Characteristics	Base	Depression	
	N	Frequency	Percentage
Age			
20-30	14	10	71.4%
31-40	20	14	70.0%
41-50	73	51	69.9%
51-60	93	64	68.8%
Gender			
Male	48	33	68.8%
Female	152	106	69.7%

DSM-5 depression criteria was fulfilled by 139(69.5%) patients. Among these depression patients, 115(82.7%) were above 40 years of age. Gender wise, 106 out of 152 female patients and 33 out of 48 male patients were having depression along with stable angina (Table 2).

DISCUSSION

Reporting of severe symptoms, despite having less amount of objective ischemia in stable angina could lead to non-satisfaction with medical therapy given for the said disease. Same happens in the patients of stable angina. Baltimore longitudinal study of aging reported same dilemma amongst female patients.[4-7] Mean overall prevalence of depression is 34% (range 29–66% for women and 10–33% for men).[8-10] Our study showed that most of the stable angina patients who are suffering from depression were in the age group of 50 and above, which is consistent with study by Pimple et al.[11] Our patient percentage with depression was 69.5%. As our study population consisted mainly of females i.e. 76%, so we can say that female patients with depression and psychosomatic complaints mimicking angina should be subject to standard testing before considering them just suffering from depression alone.

Depression and anxiety also increases the burden of symptoms in the stable angina and need screening and treatment along with standard therapy for underlying coronary disease. Indeed symptoms of depression are associated with odds ratio 1.17 for higher class of angina.[10-11] Women of age 50 or below with angina frequently have more depression versus males, as reported by Vaccarino et al.[12] Our study showed only 46.5% population to be above the age of 50 years and majority of that population being females. Another study by Dogar et al[13] also reported higher presence of depressive disorders in the female patients with cardiac disorders.

In a recent study from Gilgit by Hussain et al[14] also reported the majority of depressed cardiac patients in the 50 years age group. Although this and another study reported the prevalence of depression in heart patients around 15%, our study shows much higher frequency i.e. 69.5%, of depression in our population in Peshawar.[14,15] It is not only prudent to check every patient with major depression for ischemic heart disease, on an ECG recording, but also to rule out QT prolongation as a result of antidepressant drugs and coexistent myocardial ischemia. Citalopram is particularly notorious for its QT prolonging effect.[16,17]

CONCLUSION

Depression can accompany stable angina and often females are most likely affected. So the symptom of chest pain or angina equivalent symptom in a depressed female cannot be ignored and should prompt screening for stable ischemic heart disease.

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