Post-traumatic Stress Disorders amongpatients with Myocardial Infarction in Mosul city

كرب ما بعد الصدمة لدى المرضى المصابين باحتشاء العضلة القلبية في مدينة الموصل

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الخلاصة:

الخلفية :اضطراب كر بما بعد الصدمة هو اضطراب القلق الشديدة التي يمكن أن يظهر بعد التعرض لأي شكل من أشكال الأحداث المؤلمة بما في ذلك احتشاء عضلة القلب.اضطراب كرب ما بعد الصدمةوربما تؤثر على نوعية الحياة وحصيلة القلب والأوعية الدموية.
الأهداف: هدفت الدراسة إلى تقييم شدة الأعراض الأساسية للاكتئاب والقلق والإجهاد لدى مرضى أحشاء العضلة القلبية، وللدلالة على اضطراب كرب ما بعد الصدمةبين مرض احتشاء عضلة القلب حسب الجنس، العمر والشدَّة.
المنهجية: دراسة وصفية، تم تطبيق التصميم في مستشفى أبن سينا التعليمي في مدينة الموصل للفترةمن 14 أيار،2012الى الاول أيلول، 2012من أجل تحقيق أهداف هذه الدراسة،وتكونت عينة الدراسة من (54) مريض مشخصين كمرض احتشاء العضلة القلبية. وأعمارهم تتراوح بين(40 – 89) سنة.في هذه الدراسة تم استخدام مقياس لتشخيص المرضى الذين يعانون من القلق والاكتئاب والإجهاد (1995) .**النتائج:** أشارت النتائج أن معظم المرض كان لديهم إجهاد متوسطة والتي شكلت (48%) بينما (55%) منهم القلق الشديد للغاية، وكانوا يعانون من كآبة متوسطة .غالبية الذكورِ كَان لديهم اِضطراباتُ الإجهادِ متوسطة والتي شكلتْ (48.5 %)، بينما (69.5 %) مِنْ الأناث كَانَ لديهما ضطرابات قلق حاد جداً وأغلبيةِ الأناث كَانَ لديهم كآبةُ شديدة.
استنتاجات: سلطت هذه الدراسة الضوء على تطور اضطرابات كرب ما بعدالصدمة لدى مرض احتشاء العضلة القلبية. اضطرابات القلق كانت الأكثر شدة من اضطرابات الكأبة والإجهاد. اِضطرابات القلق كانت الأكثر تكرار ونسبة مئويةُ لدى الإناث. إضطرابات الكآبة كانت الأعلى نسبة والأعلى تكراراوظهرت في الفئة العُمرية (50-59).
التوصيات : أوصت الدراسة بتقديم الرعاية الشاملة للمريض احتشاء العضلة القلبية من جميع النواحي(النفسية ،الصحية ،الاجتماعية والتعليمية). الطبيب النفسي والممرض يجب ان يكونوا واعيين لنسب الزيادة الحاصلة لكرب ما بعد الصدمة لدى مرضى احتشاء العضلة القلبية وأهمية التشخيص المبكر وأحاله المرض المشتبه بهم الى وحدة البحوث النفسية.

Abstract:

Background: Post-traumatic stress disorder (PTSD) is a severe anxiety disorder that can develop after exposure to any forms of traumatic events including myocardial infarction (MI). PTSD after MI may affect quality of life and cardiovascular outcome.
Objective: This study aimed to assess the degree of severity of the core symptoms of depression, anxiety and stress in MI patients,to signify Post-traumatic Stress Disorders among MI patients according to their age, sex and severity,to define the full range of core symptoms of depression and anxiety, meet difficult standards of psychometric adequacy in MI patients.
Method:A descriptive study, design was applied in Ibn sena teaching hospital, in Mosul city for period from 14th, May, 2012 to 1st, September, 2012 in order to achieve the objectives of the present study.The study subjects consist of54 patients who were diagnosed with myocardial infarction in Ibn sena teaching hospital, their age ranges between (40-89) years.In the present study Depression, Anxiety and Stress Scale (DASS,1995) was used to diagnose patients with Depression Anxiety and Stress.
Results: The severity of Post-traumatic Stress Disorders in MI patients shows that most of patients had moderate stress disorders which constituted 48% while 55%of them had extremely severe anxiety, and on depression scale had moderate and severe.The majority of male had moderate stress disorders which constituted (48.5%), while (69.5%) of female had extremely severe anxiety disorder and the majority of female had server depression.
Conclusions:The study highlighted the developmentof PTSD after MI.Anxietydisorders are more severe than depression and stress disorders. Anxiety disorders have the highest percentage and frequency among female.Depression disordershas the highest percentage and frequency and found in age group (50-59).

Recommendations: Integration care of patient with myocardial infarction in all spectrums (psychiatry, healthy, socially, and educationally). Psychiatrists and nurses must be aware of increased prevalence of PTSD after MI and importance of early detection of any suspected case and referral to Psychiatric research unit.
Key Word: PTSD (Post traumatic stress disorder), MI(Myocardial Infarction)**.**

INTRODUCTION:

Post-traumatic stress disorder (PTSD) is described by the DSM-IV-TRas the development of characteristic symptoms following exposure to an extreme traumatic stressor involving a personal threat to physical integrity or to the physical integrity of others[(1)]. The symptoms may occur after learning about unexpected or violent death, serious harm, or threat of death or injury of a family member or other close associate. These symptoms are not related to common experiences such as uncomplicated bereavement, marital conflict, or chronic illness, but are associated with events that would be markedly distressing to almost anyone[(2)]. The individual may experience the trauma alone or in the presence of others, experiencing violent personal assault, being kidnapped or taken hostage, being tortured, being incarcerated as a prisoner of war, experiencing natural or man-made disasters, surviving severe automobile accidents, or being diagnosed with a life-threatening illness, Characteristic symptoms include re-experiencing the traumatic event, a sustained high level of anxiety or arousal, or a general numbing of responsiveness. Intrusive recollections or nightmares of the event are common. Some individuals may be unable to remember certain aspects of the trauma[(3)]. Symptoms of depression are common with this disorder and may be severe enough to warrant a diagnosis of a depressive disorder. In the case of a life-threatening trauma shared with others, survivors often describe painful guilt feelings about surviving when others did not or about the things they had to do to survive. Substance abuse is common[(4)]. The full symptom picture must be present for more than 1 month and cause significant interference with social, occupational, and other areas of functioning. If the symptoms have not been present for more than 1 month, the diagnosis assigned is acute stress disorder[(5)]. The disorder can occur at any age. Symptoms may begin within the first 3 months after the trauma or there may be a delay of several months or even years. Studies reveal a life time prevalence for Post-Traumatic Stress Disorders of approximately 8 percent of the adult population in the United States. About 30 percent of Vietnam veterans have experienced PTSD, and an additional 25 percent encountered subclinical forms of the disorder[(6)]. This study aimed to assess the degree of severity of the core symptoms of depression, anxiety and stress in MI patients,to signify Post-traumatic Stress Disorders among MI patients according to their age, sex and severity, to define the full range of core symptoms of depression and anxiety, meet difficult standards of psychometric adequacy in MI patients.The development of psychological stress after the heart diseases has been one of the primary focus of psychological research for the last couple of decades.limited research on the post-traumatic stress disorders after myocardial infraction in Iraq.

METHODOLOGY:

The study objectives was to assess the degree of severity of the core symptoms of depression, anxiety and stress in MI patients,to signify Post-traumatic Stress Disorders among MI patients

A descriptive study, design was applied in Ibn sena teaching hospital, in Mosul city for period was carried out from May 14th, 2012 to September 1st, 2012, A nonprobability (purposive) sample consisted of (54) patients were chosen from Ibn sena teaching hospital, in Mosul city with myocardial infarction, In the present study Depression Anxiety and Stress Scale (1995) was used to diagnose patients with Depression Anxiety and Stress, (This scale prepared to be applied by researcher through their interviewing of patients,it consists of 42-item,divided in tothree self-report scales designedto measure the negative emotional states of depression, anxiety and stress). Each ofthe three scales contain 14 items. The Depression scale assesses dysphoria,hopelessness, devaluation of life,self-deprecation, and lack of interest/involvement, anhedonia, and inertia. The Anxiety scaleassesses autonomic arousal, skeletal muscle effects, situational anxiety, andsubjective experience of anxious affect. The Stress scale (items) is sensitive to levelsof chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, andbeing easily upset/agitated, irritable/over-reactive and impatient. Respondents areasked to use 4 point severity/frequency scales to rate the extent to which they haveexperienced each state over the past week. The questionnaire was answered with four options as (0 if not apply), (1 if occasionally), (2 if often), (3 if always), the scales was measure the severity of the Depression, Anxiety and Stress based on the patients scores which given by researchers. The score for each of the respondents over each of the sub- scales, are then evaluated as per the severity-rating index below[7].

PTSD / Severity	Depression	Anxiety	Stress
Normal	0-9	0 - 7	0 – 14
Mild	10-13	8 – 9	15 – 18
Moderate	14-20	10 – 14	19 – 25
Severe	21-27	15 – 19	26 – 33
Extremely severe	28+	20+	34 +

The content validity of the scale, was done through review of (10) experts of different specialties related to the field of the present study. The Reliabilityof the scale were determined through the use of test and re-test approach and the interval period was more than two weeks. Data were prepared, organized, and entered into a computer file; Statistical Package for the Social Science (SPSS, version 18) is used for descriptive data analysis.

Result:

Table (1) Distribution of MI patients according to Severity of the PTSD

Severity PTSD	Normal		Mild		Moderate		Severe		Extremely severe		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Stress	9	16.75	4	7.25	26	48	14	26	1	2	54	100
Anxiety	2	3.75	0	0	10	18.5	12	22.25	30	55.5	54	100
Depression	6	11	9	16.5	18	33.5	18	33.5	3	5.5	54	100

The table shows that the majority of sample had moderate stress, while on anxiety scale had extremely severe, and on depression scale had moderate and severe .

Table (2) Distribution of MI patients according to Severity of the PTSD in relation to their sex

Severity PTSD		Normal		Mild		Moderate		Severe		Extremely severe		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Stress	M	7	22.5	4	13	15	48.5	5	16	0	0	31	100
	F	2	8.75	0	0	11	47.75	9	39	1	4.5	23	100
Anxiety	M	2	6.5	0	0	9	29	6	19.25	14	45.25	31	100
	F	0	0	0	0	1	4.5	6	26	16	69.5	23	100
Depression	M	4	13	7	22.5	10	32.25	10	32.25	0	0	31	100
	F	3	13	2	8.75	7	30.5	8	34.75	3	13	23	100

The majority of male had moderate stress disorders which constituted (48.5%), while (69.5%) of female had Extremely severe anxiety disorder and the majority of female had server depression.

Table (3)Distribution of MI patients according to Severity of the PTSD in relation to their age

Age		40-49		50-59		60-69		70-79		80-89		Total	
PTSD		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Stress	Normal	2	22.25	3	33.5	4	44.25	0	0	0	0	9	16.6
	Mild	2	50	0	0	1	25	1	25	0	0	4	7.4
	Moderate	4	15.5	4	15.5	9	34.5	4	15.5	5	19	26	48
	Severe	2	14.25	5	35.75	3	21.5	3	21.5	1	7	14	26
	Extremely	0	0	1	100	0	0	0	0	0	0	1	2
	Total	10	18.5	13	24	17	31.5	8	14.75	6	11.25	54	100
Anxiety	Normal	1	50	0	0	1	50	0	0	0	0	2	3.8
	Mild	0	0	0	0	0	0	0	0	0	0	0	0
	Moderate	2	20	3	30	4	40	1	10	0	0	10	18.5
	Severe	0	0	5	42	3	25	2	16.5	2	16.5	12	22.2
	Extremely	7	23	5	16.5	9	30	5	16.5	4	14	30	55.5
	Total	10	18.5	13	24	17	31.5	8	14.75	6	11.25	54	100
Depression	Normal	1	16.5	2	34	2	33	0	0	1	16.5	6	11
	Mild	2	22.25	0	0	6	66.5	1	11.25	0	0	9	16.75
	Moderate	5	27.25	4	22.25	4	22.25	4	22.25	1	6	18	33.3
	Severe	1	6	7	38.5	4	22.25	2	11	4	22.25	18	33.3
	Extremely	1	33.33	0	0	1	33.33	1	33.33	0	0	3	5.65
	Total	10	18.5	13	24	17	31.5	8	14.75	6	11.25	54	100

The majority of sample had moderate stress disorders and occurred in age group (60-69), while the majority of sample had severe depression disorders and occurred in age group (50-59) and the majority of sample had extremely sever anxiety disorder and occurred in age group (40-49)

DISCUSSION:

Our results are in agreement with that PTSD can develop after MI in developing countries like Iraq.These results are in agreement with(4,5) that shows the PTSD if develops after MI can further deteriorate the heart condition consequently slowing the recovery process and hastening the progression of heart disease. Moreover the development of PTSD can also affect the quality of life of the individual[4, 8].Previous studies however hypothesize that being mentally free i.e. being in no tension relieves anxiety and ultimately prevents PTSD from developing upon exposure to a traumatic event[11]. Quality of life of patient was based on patients on perception about the quality of life before the MI. Results show that those with poor life quality had a higher

frequency. Previous studies only regard PTSD as a factor that worsens the quality of life [9,4].In the case of MI, as with other traumatic events, the subjective perception of the seriousness of the event is very relevant, more so than the objective threat of the cause of stress. In fact, the perceived severity, rather than the objective seriousness of MI, can predict the onset of a posterior PTSD[10].The sudden and brusque occurrence of a MI is a potentially serious and life-threatening condition. It is interesting that, during the first few days, the heart attack was not considered to be a highly ‘‘traumatic’’ event by the participants but, 5 months and 13 months after the MI, it was considered so. Nevertheless, this perceived severity and the perception of the event as traumatic did not correspond to a grand estimation that one’s life was in danger[14]. Probably, the fact that the patient was treated rapidly and clinically stabilized in a safe, hospital environment, leads to a weakening of the perception of risk, which in turn can explain the relatively low prevalence of symptoms related to stress encountered in this study and in studies of similar design [7].The majority of male had moderate stress disorders which constituted (48.5%), while (69.5%) of female had Extremely severe anxiety disorder and the majority of female had server depression. table (2).Both males and females were developingPTSD but frequency was higher in females. The higherfrequency in females corresponds with the studiescarried out in the western countries which indicates that females are more prone to develop anxietydisorders[13].a study by Bennett et al (2009) showed an inverse relationship between age and symptoms of PTSD in MI patients[1].In the case of age groups patients were divided into five age groups commonly used in Iraq.Previous studies also show that old aged people had a higher frequency of PTSD [12].The majority of sample had moderate stress disorders and occurred in age group (60-69), while the majority of sample had severe depression disorders and occurred in age group (50-59) and the majority of sample had extremely sever anxiety disorder and occurred in age group (40-49) table(3).Severity of a traumatic event has been identified as the major risk factor for the development of PTSD in the past studies [4].The severity was based on the pain the patient felt during the heart attack.Most of patients had moderate stress disorders which constituted 48% while 55%of them had extremely severe anxiety, and on depression scale had moderate and severe table(1).This study concludedthe developmentof PTSD after MI.Anxietydisorders are more severe than depression and stress disorders. Anxiety disorders have the highest percentage and frequency among female.Depression disordershas the highest percentage and frequency and found in age group (50-59). This study recommended to Integration care of patient with myocardial infraction in all spectrums (psychiatry, healthy, socially,and educationally).Psychiatrists and nurses must be aware of increased prevalence of PTSD after MI and importance of early detection of any suspected case and referral to Psychiatric research unit. Assess all patients for developmental and behavioral problems and seek additional evaluation and therapy to reduce developmental or behavioral problems, as necessary.Provide psychiatric care programs to patients with PTSD to rehabilitate and instruct them to return to their lives.

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