

Descriptive Study on Frequency of Depression in Chronic Hepatitis C

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ABSTRACT

Objective: The objective of this study was to determine the frequency of depression in uncomplicated chronic hepatitis C virus (HCV).

Study Design: Descriptive / cross sectional study.

Place and Duration of Study: This study was conducted at the Department of Medicine PMCH Nawabshah from January 2016 to April 2017 using Beck depression inventory (BDI).

Materials and Methods: 130 patients were selected for this study after taking informed consent to all the patients with chronic hepatitis C were included depression was assessed using BDI.

Results: A total 150 pts were enrolled for this study out of them 89 were males and 61 were females with history of HCV more than 6 months depression confirmed by BDI scale.

Conclusion: Depression is common in chronic hepatitis C patients, some patients even present with depression, early diagnosis and treatment of chronic hepatitis C and depression patients quality of life is improved and complications can be reduced.

Key Words: Depression, Chronic hepatitis C, HCV.

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INTRODUCTION

Depressive disorder is defined as one or more depression disorder with five or more than five symptoms of depression As in other chronic illnesses hepatitis c is associated with psychiatric disorder particularly depression¹. Depression is characterized by low mood and loss of interest in enjoyable activities chronic liver disease is associated with depression.

According to clinical studies patients with CLD are associated with depression². Incidence of hepatitis C in Pakistan is very high³. Depressive symptoms are more with HCV⁴. Depression have adverse effect on illness, physical symptoms, functional impairment reduced compliance to treatment and quality of life is reduced.⁵ And Depressive symptoms in patients with chronic hepatitis C are related to awareness of diagnoses and prognosis.⁶

Chronic hepatitis C is major public health problem in the world 170 million people are affected.⁷ HCV is common cause of liver failure and leading indication of liver transplant in developed countries depression commonly occurs in chronic infection presence of

depression in chronic hepatitis C has adverse effect on the illness with decreased compliance of treatment and quality of life.⁷ Psychiatric side effects develop in patients with interferon therapy especially depression⁸ according to new studies depression can be treated in patients who are on interferon therapy and ribavirin for chronic hepatitis C⁸. Until the approval of sofosbuvir and daclatasvir in 2014, interferon was also used as triple combination regimen

Worldwide in many countries interferon is being used as a treatment of Chronic hepatitis C. The most common psychiatric side effects of interferon is depression⁹ suicidal ideation, suicide and psychosis can occur due to depression early termination of antiviral treatment chronic hepatitis C patients¹⁰ compared to general population psychiatric disorder particularly depression are increased in chronic hepatitis C patients¹¹

Depression is a common problem in chronic hepatitis C patients who do not receive antiviral therapy¹² Depression screening was needed in patients with Chronic hepatitis C.¹² Higher incidence of depression in chronic hepatitis C who do not receive antiviral therapy in previous studies¹³

MATERIALS AND METHODS

Study was carried out in 150 patients with chronic hepatitis C virus in the out patient department of medicine at PMCH, Nawabshah from June 2015 to Dec 2016.

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Inclusion Criteria:

1. Age 18 years and above
2. Anti HCV positive
3. PCR HCVRNA positive

Exclusion Criteria:

1. Cirrhosis of liver
2. Coinfection with HBV and HIV
3. Any major illness
4. Alcohol abusive i/v abuse
5. Severe psychiatric illness

Informed consent was taken from all the patients questionnaires were given to all the patients one questionnaire was included complete history and second questionnaires for BDI scale to asses depression, complete history clinical examination including general physical examination and systemic examination was done .

RESULTS

On complete history of the patient majority of the patients presented with depressive symptoms along with dyspepsia, general physical examination was normal and systemic examination was normal no any abnormal finding was not present.

Age of the patients range from 18-60 years mean age was 42.20, farmers were 47, Housewives 46, employed 9, self employed 10, un employed 13, Health workers 5, education level: uneducated 60, primary 40, middle 15, matric-15 graduate- 10, married-110, unmarried-5, widows- 15 - divorce 20, viral load more than 5 lacks in 100 patients, less than 5 lacks in 50 patients , SGPT increased in 80 patients, SGPT normal 70, bilirubin increased in 15 patients, Normal in 135 patients , Depression= Scale 8 patients= scale 1, 22 patients = scale 2, 90 patients = scale 3, 10 patients= scale 4.

Table No.1: Sex

Sex	Frequency	Percent	Valid Percent	Cumulative Percent
1	82	63.1	63.1	63.1
2	48	36.9	36.9	100.0
Total	130	100.0	100.0	

Table No.2: Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	79	60.8	60.8	60.8
	2.00	12	9.2	9.2	70.0
	3.00	11	8.5	8.5	78.5
	4.00	10	7.7	7.7	86.2
	5.00	13	10.0	10.0	96.2
	6.00	5	3.8	3.8	100.0
	Total	130	100.0	100.0	

In statiscal ananlysis of patients- Male denoted by 1, Female by 2, education level: Uneducated =1, Primary =2, Middle =3, Matric =4, Inter = 5, Graduate = 6.

Occupation: Farmers = 1, Housewives =2, Employed= 3, Self employed = 10, Unemployed= 13, Health workers = 5.

Table No.3: Occupation

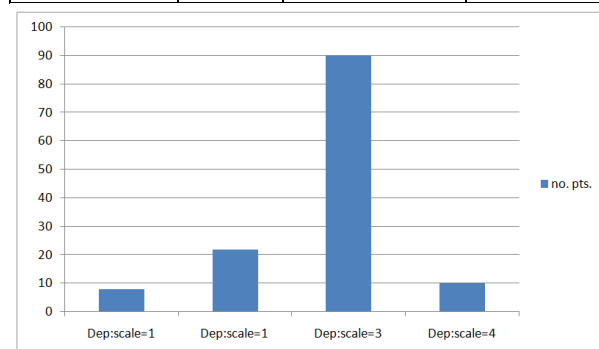
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	47	36.2	36.2	36.2
	2.00	46	35.4	35.4	71.5
	3.00	9	6.9	6.9	78.5
	4.00	10	7.7	7.7	86.2
	5.00	13	10.0	10.0	96.2
	6.00	5	3.8	3.8	100.0
	Total	130	100.0	100.0	

Table No.4: Dep. Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	8	6.2	6.2	6.2
	2.00	22	16.9	16.9	23.1
	3.00	90	69.2	69.2	92.3
	4.00	10	7.7	7.7	100.0
	Total	130	100.0	100.0	

Table No.5: Post of outcome

Vaiable	N	Mean	P-Value
Age	130	42.20+ _11	0.587
Sex	130	1.36+ _0.48	0.009
Occupation	130	2.31+ _1.47	0.640
Education	130	2.08+ _1.58	0.517
SGPT	130	62.90+ _26	0.290
Bilirubin	130	0.97+ _0.07	0.613
Viral.Load	130	667708.0+ 201451	0.215

**Figure No.1: Depression Percentage**

DISCUSSION

In this study majority of the patients of chronic hepatitis C initial presentation was depression. Higher percentage of chronic hepatitis C had been diagnosed having depression.¹⁴ In an other study HCV infected and healthy controls, patients have depressive disorder than controls¹⁵

Depression was strongly associated with chronic hepatitis C in a recent study association of depression with different types of CLD.¹⁶

In other study 90 participants it was observed that Chronic hepatitis C was associated with Major depressive disorder independent of interferon therapy.¹⁷ Depression is associated with HCV infection but patients on peglated IFN alpha therapy with Chronic hepatitis C depression develop in 30-70% during treatment period Mild to severe depression develops¹⁸. in a study 10% patients were on interferon therapy they withdraw. Treatment due to development of major depression¹⁸ It was found that depression in HCV infected patients, both treated and untreated with IFN Treatment. From this study infected HCV patients have high psychiatric disorders irrespective either they were on antiviral treatment.¹⁹ On psychiatric self assessment in non IFN receiving patients depression was 28% to 57% in Chronic hepatitis C patients,²⁰ in few reports depressive symptoms are increased up to 77% of interferon therapy.²⁰ BDI score were increased after in +INF treatment as compared to non INF treatment.

Patients who were on IFN treatment had severe depression compared to non treatment IFN patients who have mild depression,²⁰ depressive disorder were more in female than male patients in Chronic hepatitis C patients. older age, unemployed single and previous mood disorders were more affected psychiatric disorders are more with Chronic hepatitis C infection.²¹ Psychiatric disorders in Chronic hepatitis C patients are more compared to general population²¹

In a study in US veterans psychiatric disorders were more in Chronic hepatitis C patients.

Risk of depression is increased in Chronic hepatitis C patients due to stigmatization and psychosocial impact of personal history of Chronic hepatitis C infection.²²

According to allavietal assessment of depression prior to decrease treatment²²

Biological changes in CNS occur directly in patients infected with HCV It has been observed that decreased dopamine and serotonin transporters binding is associated with cognitive impairment in Chronic hepatitis C patients.⁹

Path physiological mechanism is not understood yet, but possibility of HCV spread into the CNS where its replication are at low level.¹¹

CONCLUSION

Depression is a major problem in chronic hepatitis C patients, most of the patients presented with depression along with dyspepsia in chronic hepatitis C patients. Majority of the patients ignore depression and delay the treatment of chronic hepatitis C, few patients are not screened are unaware about chronic hepatitis C, few know about hepatitis C when they come for blood transfusion and Previously patients were treated with interferon, but now oral drugs are available for the

treatment of chronic hepatitis C patients. Interferon causes depression. Early diagnosis and treatment of hepatitis C and depression patient's quality of life can be improved and complications can be reduced. Supportive environment and healthcare team are required for medical and psychosocial management of patients with chronic hepatitis C.

Author's Contribution:

Concept & Design of Study:	Jeando Khan Daidano, Akbar Hussain Yousfani
Drafting:	Akbar Hussain Yousfani and Bilqees Daidano
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Conflict of Interest: The study has no conflict of interest to declare by any author.

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