

*Research Article***Rome Iv Diagnostic Criteria For Functional Gastrointestinal Disorders in Egyptian Patients With Chronic HCV****Zienab M. Saad, Al-Shymaa A. Hasanain and Hoda A. Abd Elfadil Hassan**

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**Abstract**

**Introduction:** Hepatitis C virus (HCV) infection is a major cause of chronic liver disease, with approximately 71 million chronically infected individuals worldwide 2017. **Patients and Methods:** **Aim of the study:** Application Of Rome Iv Diagnostic Criteria Of Functional Git Disorders In Chronic Hepatitis C The Study Will Be Carried Out On Patients With Chronic Hepatitis C. **Results:** HCV cases include age sex BMI residence education the age of control ranges from 27 to 75 with mean 38.4 year the age of cases ranges from 19 to 78 with mean 38.3 year BMI of control ranges from 22 to 39 with mean 26.3 BMI of cases ranges from 20 to 39 with mean 26.5 the control include 370 male 130 female cases include 741 male 265 female residence of control include 256 urban 244 rural. **Summary & Conclusion:** Hepatitis C virus (HCV) infection is a blood borne infection The diagnosis of HCV infection is made by the detection of antibodies against HCV (anti-HCV) and/or by detecting the presence of the HCV RNA in serum

**Keywords:** Rome Iv, Functional Gastrointestinal, Chronic HCV**Introduction**

Hepatitis C virus (HCV) infection is a major cause of chronic liver disease, with approximately 71 million chronically infected individuals worldwide 2017. Clinical care for patients with HCV-related liver disease has advanced considerably thanks to an enhanced understanding of the pathophysiology of the disease, and because of developments in diagnostic procedures and improvements in therapy and prevention. These European Association for the study of the Liver Recommendations on Treatment of Hepatitis C describe the optimal management of patients with acute and chronic HCV infections in 2018 and onwards.

2017, Globally, an estimated 71 million people have chronic hepatitis C infection. Approximately 399 000 people die each year from hepatitis C, mostly from cirrhosis and hepatocellular carcinoma In 2015, the seroprevalence of HCV infection in Egypt has declined to 6.3% among the studied population with an overall estimated 30% decrease in HCV prevalence in Egypt Kandeel et al., 2016). Parenteral exposure to the hepatitis C virus is the

most efficient means of transmission, it is a leading cause of chronic liver disease worldwide.

The diagnosis of HCV infection is made by the detection of antibodies against HCV (anti-HCV) and/or by detecting the presence of the HCV RNA in serum<sup>(1)</sup>.

The liver is the main site of virus replication but it can also replicate at extrahepatic sites such as peripheral blood mononuclear cells<sup>(2)</sup>

**Patients and Methods****Aim of the study**

Application of rome iv diagnostic criteria of functional git disorders in chronic hepatitis C. The study will be carried out on patients with chronic hepatitis C.

**Exclusion criteria**

Symptoms were excluded from participation in the study: inflammatory bowel disease (Crohn's disease or ulcerative colitis), cancer anywhere in the GI tract, current infection of the GI tract, celiac disease, or an eating disorder. Individuals

who had undergone bariatric surgery or resection of any part of their bowels except appendix or gallbladder operations were also excluded from participation

### Inclusion Criteria

All included patients will be subjected to

1) History taking including personal history name = age = sex = occupation residence educational level BMI symptomatology, past history stressing on history of DM and lipid disorders, drug history.

2) Basic investigations including CBC, liver function tests, renal function tests, INR, Random blood glucose, alpha fetoprotein HCV, RNA, PCR, abdominal ultrasonography.

3) Rome iv diagnostic questionnaire. The purpose of this questionnaire is to learn more about the health problems that people sometimes have with their stomach and intestines. The questionnaire will take about 15–20 minutes to complete. To answer each question, fill in the circle directly to the left of the correct answer. You may find that you have not had any of the symptoms that we ask you about. When this happens, you will be instructed to skip over the questions that do not apply to you, but do not skip questions unless you are told to do so. If you are not sure about an answer, just answer as best you can. It is easy to miss questions, so please check that you have not left any out as you go.

### Results

1		Control N=500	Cases N=1006	P value
<b>Functional dyspepsia syndrome</b>	No	284(56.8%)	500(49.7%)	<b>0.009*</b>
	Yes	216(43.2%)	506(51.3%)	
<b>Early satiety</b>	No	268(53.6%)	452(44.9%)	<b>0.002*</b>
	Yes	232(46.4%)	554(55.1%)	
<b>Post-prandial distress</b>	No	282(56.4%)	504(50.1%)	<b>0.021*</b>
	Yes	218(43.6%)	502(49.9%)	
<b>Epigastric pain</b>	No	296(59.2%)	536(53.3%)	<b>0.030*</b>
	Yes	204(40.8%)	470(46.7%)	
<b>IBS2</b>	No	198(39.6%)	290(28.8%)	<b>&lt;0.001*</b>
	Yes	302(60.4%)	716(71.2%)	
<b>IBS</b>	No	198(39.6%)	290(28.8%)	<b>&lt;0.001*</b>
	Constipation	156(31.2%)	332(33%)	
	Diarrhea	77(15.4%)	144(14.3%)	
	Mixed	69(13.8%)	240(23.9%)	

- Chi square test for qualitative data between the two groups

- \*: Significant level at P value < 0.05

Table show comparison of symptoms between control and cases include functional dyspepsia early satiety postprandial distress s epigastric pain IBS constipation diarrhea mixed.

### Discussion

Hepatitis C virus (HCV) infection is a major cause of chronic liver disease, with approximately 71 million chronically infected individuals worldwide 2017.<sup>(3)</sup> Clinical care for

patients with HCV-related liver disease has advanced considerably thanks to an enhanced understanding of the pathophysiology of the disease, and because of developments in diagnostic procedures and improvements in therapy and prevention<sup>(4)</sup>.

Functional gastrointestinal disorders, the most common diagnoses in gastroenterology, are recognized by morphologic and physiological abnormalities that often occur in combination including motility disturbance, visceral hypersensitivity, altered mucosal and immune function, altered gut microbiota and altered central nervous system processing.<sup>(5)</sup>

The Rome Foundation classification of FGIDs is based primarily on symptoms rather than physiological criteria.<sup>(6)</sup> This has been favored because of its utility in clinical care, limited evidence that physiological disturbance fully explained patient symptoms, and the fact that symptoms are what bring patients to health care providers. However, physiological criteria still are permitted, as for the anorectal disorders, if they increase diagnostic precision. We believe that in the future biomarkers will be included in the criteria if they can enhance their positive predictive value.<sup>(7)</sup>

Patients with Chronic hepatitis C usually have different abdominal complaints. Abdominal pain or discomfort is frequently seen in clinical practice in patients with chronic HCV without organic lesion, the functional origin of abdominal complaints is claimed in many patients<sup>(8)</sup>

In our study There was significant difference in functional dyspepsia between the control and chronic HCV group The percentage of patients with FD diagnosed according to Rome IV criteria were significantly higher in patients with chronic HCV than normal controls (51.3%, 43.2% respectively) regarding to functional dyspepsia subtypes early satiety subtype was significantly predominant than the PDS subtype

### Summary & Conclusion

FD is a prevalent finding in HCV patients and its pattern is not different from that of the general population. FD is more prevalent in patients with chronic hepatitis C. Obese, chronic HCV patients with high level with education and with higher fibrosis scores are more likely to have FD

Patients with chronic hepatitis C often suffer from different abdominal complaints. In the present study, we find that abdominal complaints in hepatitis C patients could be of functional origin, as IBS is a prevalent finding in patients with hepatitis C genotype 4 in our locality, and In HCV IBS patients, we found that IBS-C and IBS-M are the predominant types.

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