Awareness of Hepatitis in Hemodialysis Patients with Viral Hepatitis

Viral Hepatitli Hemodiyaliz Hastalarında Hepatit Farkındalığı

Özkan GÜNGÖR[1]
Necmi EREN[2]
Betül GÜZEL[1]
Egemen ŞENEL[1]
Muhammed ÇİFTÇİOĞLU[1]
Mehmet TUNCAY[3]
Gülsüm AKKUŞ[1]
Yasemin YAVUZ COŞKUN[4]
İsmail KOÇYİĞİT[5]
Ertuğrul ERKEN[1]
Orçun ALTUNÖREN[1]

1 Kahramanmaraş Sütçü İmam University Faculty of Medicine Hospital, Department of Nephrology, Kahramanmaraş, Turkey
2 Kocaeli University Faculty of Medicine Hospital, Department of Nephrology, Kocaeli, Turkey
3 Ersin Aslan Education and Research Hospital, Department of Nephrology, Gaziantep, Turkey
4 Erzurum Education and Research Hospital, Department of Nephrology, Erzurum, Turkey
5 Erciyes University Faculty of Medicine Hospital, Department of Nephrology, Kayseri, Turkey

ABSTRACT

OBJECTIVE: In our study, we aimed to evaluate the history and awareness of hepatitis in HD patients with viral hepatitis who were followed up at our center and in different provinces.

MATERIAL and METHODS: A total of 260 HD patients with chronic viral hepatitis from 6 different provinces were included in the study. A total of 27 multiple-choice questions were asked to the patients in the presence of a physician, and then the answers given by the patients were evaluated.

RESULTS: The mean age was 57±13 and 162 were male. 97 patients had hepatitis B, 154 (59.2%) patients had hepatitis C, and 8 patients had coexisting B and C. 241 (92%) patients knew that they themselves had viral hepatitis, but 224 of these patients knew which type of viral hepatitis they carried. When asked about the problems that the hepatitis virus may cause in themselves, 56% of the patients had no idea whereas the remaining patients knew that it can lead to cirrhosis or liver cancer. 48% of the patients did not have enough knowledge about viral hepatitis. 112 (43%) patients had never gone to an Infectious Disease or Gastroenterology Clinic for viral hepatitis.

CONCLUSION: In conclusion, the awareness of HD patients with viral hepatitis about this disease should be increased.

KEY WORDS: Hemodialysis, Viral hepatitis, Awareness

ÖZ

AMAÇ: Çalışmamızda merkezimizde ve farklı illerde takip edilen hepatitli HD hastalarının hepatit hikayelerini ve farkındalıklarını değerlendirmeyi amaçladık.

GEREÇ ve YÖNTEMLER: Çalışmaya 6 ayrı ilden toplam 260 viral hepatitli kronik HD hastası alındı. Hastalara doktor eşliğinde 27 tane çoktan seçmeli soru soruldu ve verdikleri cevaplar değerlendirildi.

BULGULAR: Yaş ortalaması 57±13 ve 162' si erkekti. 97 hastada hepatit B, 154 hastada (%59,2) hepatit C, 8 hastada ise B+C birlikteliği bulunmaktaydı. 241 hasta (%92) kendisinde hepatit virüsü olduğunu biliyor, ancak bu hastaların 224' ü hepatitin hangi cinsinin olduğunu bilmekteydi. Hepatit virüsünün kendisinde yol açabileceği sorunlar sorulduğunda hastaların %56'sının herhangi bir fikri yokken, kalan hastalar ise siroz veya karaciğer kanserine yakalanabileceklerini biliyorlardı. Hastaların %48'i hepatit konusunda hakkında yeterli bilgiye sahip olmadıklarını belirtti. 112 hasta (%43) hepatit için Enfeksiyon Hastalıkları ya da Gastroenteroloji kliniğine hiç başvurmamıştı.

SONUÇ: Hepatitli hemodiyaliz hastalarının bu hastalık konusunda farkındalıkları artırılmalıdır.

ANAHTAR SÖZCÜKLER: Hemodiyaliz, Viral hepatit, Farkındalık

INTRODUCTION

Chronic renal failure (CRF) is an important public health problem that has become epidemic in the world and in our country. The increased incidence of chronic diseases such as diabetes and hypertension in the community unfortunately brings the risk of CRF and end stage renal disease (ESRD).

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Correspondence Address:
Özkan GÜNGÖR
Kahramanmaraş Sütçü İmam Üniversitesi Tıp Fakültesi Hastanesi, Nefroloji Bilim Dalı, Kahramanmaraş, Turkey
Phone : + 90 506 664 80 54
E-mail : ozkan.gungor@yahoo.com

The CREDIT study, which was conducted by the Turkish Society of Nephrology on 10.748 adults in 23 provinces, showed that 15.7% of adults in Turkey had CKD (1). Hemodialysis (HD) is the most commonly used treatment in ESRD patients in our country. According to the 2016 Registry Reports, there were approximately 60,000 HD patients in our country (2).

Viral hepatitis constitutes an important additional health problem for hemodialysis (HD) patients. Receiving dialysis in a separate room and/or dialysis machine causes psychological distress and deteriorates the quality of life. Progression of viral hepatitis leads to the development of chronic liver disease, cirrhosis and hepatocellular cancer and thus can decrease the chances of patients getting a kidney transplant (3-5). According to the 2016 Registry Data, when HD patients in our country were examined, 3.88% had hepatitis B, 5.2% hepatitis C, and 0.3% had coexisting hepatitis B and C (2).

In our daily practice, we have observed that some patients with viral hepatitis are aware of this disease and are regularly followed up and treated, but others are not even aware of their illness. For this reason, we aimed to evaluate the history and awareness of hepatitis in HD patients with viral hepatitis who were followed up in our center and in different provinces.

MATERIAL and METHODS

Adult HD patients with viral hepatitis who were treated for at least 3 months at dialysis centers in Kahramanmaraş, Gaziantep, Erzurum, Kayseri, Istanbul and Kocaeli provinces and had hepatitis B, hepatitis C or coexisting hepatitis B and C and accepted to participate in the study were included in the study. Demographic data (age, gender, educational status, etiology of chronic renal failure, duration of dialysis) were obtained from patient files. A total of 27 multiple-choice questions were asked to the patients in the presence of a physician, and then the answers given by the patients were evaluated (Table I). All patients were included in the study after signing informed consent forms.

Statistical Analysis

Categorical data obtained by counting were expressed as the number and ratio of patients. Continuous variables obtained by measurement were expressed as mean±SD. All statistical analyses were performed using SPSS, version 15 (SPSS, Inc., Chicago, IL, USA).

Table I: Questions for patients.

- Does the patient have known hepatitis infection before kidney disease?
- Does the patient have a history of operation before kidney disease?
- Does the patient have a history of dental extraction or filling before kidney disease?
- Does the patient have a history of blood transfusion before kidney disease?
- Does the patient have a history of operation after hemodialysis?
- Does the patient have a history of dental extraction or filling after hemodialysis?
- Does the patient have a history of blood transfusion after hemodialysis?
- Does spouse of the patient have known hepatitis?
- Does the patient have history suspicious sexual activity?
- Is the patient aware of the presence of hepatitis (B or C) in himself/herself?
- Does the patient know where he/she could be infected with hepatitis viruses?
- Does the patient know harmful effects of hepatitis; if he/she knows any, what are they?
- According to the patient, what are the disadvantages of hepatitis?
- According to the patient, is there any possibility of cure for hepatitis?
- Does the patient want to use regular hemodialysis machines, if his/her hepatitis resolves?
- Dose the patient know that hemodialysis centers do regular hepatitis tests?
- If the patient is aware of the tests, does he/she ask about the test results?
- Is the patient aware of whether doctors or nurses take additional protective precautions during routine hemodialysis procedure?
- Does the patient think he/she has adequate information about hepatitis?
- Has adequate information been given to the family members about hepatitis?
- Has the patient have regular follow-ups at the gastroenterology/infectious diseases department
- Did the patient have hepatitis treatment before?
- Is the patient currently on hepatitis treatment?
- If the patient is on hepatitis treatment, which treatment does he/she take (obtain from the physician)?
- Does the patient think the treatment he/she takes will be effective for hepatitis?
- Whom does the patient prefer to get information about hepatitis?

RESULTS

A total of 260 HD patients with chronic viral hepatitis from 6 different provinces were included in the study. For the patients, the mean age was 57 ± 13 (25-92) years and 162 (62%) were male. 58 patients were illiterate, 154 patients were primary school graduates, 40 patients were high school graduates, and 5 patients were university graduates. When the etiology of CRF was examined, 48 (18.4%) patients had diabetes, 66 (25.3%) patients had HT, 19 patients had chronic glomerulonephritis, and the other etiologies and unknown causes were responsible for the remaining patients. The vast majority of patients (88.1%) were dialysed via an arteriovenous fistula. 97 patients had hepatitis B, 154 (59.2%) patients had hepatitis C, and 8 patients had coexisting hepatitis B and C. While 71 (27.3%) patients had viral hepatitis before hemodialysis, 189 patients developed viral hepatitis after hemodialysis. Other frequent causes following hemodialysis were as follows: 114 (43.8%) patients had undergone an operation, 134 (51.5%) patients had undergone tooth extraction and filling, and 126 (48.5%) patients had received a blood transfusion. The demographic data of the patients are given in Table II.

A total of 241 (92%) patients knew that they had viral hepatitis, and 224 of these patients knew which type of viral hepatitis they carried. 8% of the patients were not even aware that they had viral hepatitis. 55 (21.2%) patients had acquired the hepatitis virus through dialysis machines, 39 patients had acquired the hepatitis virus through blood transfusion, and 5 patients had acquired the hepatitis virus through tooth extraction and filling procedures. The remaining patients indicated that they had no idea. When asked about the problems that the hepatitis virus may cause in themselves, 56% of the patients had no idea whereas the remaining patients knew that it can lead to cirrhosis or liver cancer. The disadvantages of carrying the hepatitis virus were expressed as psychological distress due to receiving dialysis in a separate room and/or dialysis machine (61 patients), creating an obstacle to kidney transplantation (33 patients), and medical necessity for treatment (23 patients).

235 (90%) patients were aware that healthcare personnel took additional measures when performing an intervention on them. 215 (82%) patients knew that viral hepatitis tests were performed at regular intervals at dialysis centers. 154 (59%) patients felt the need to learn these results from health personnel. 48% of the patients did not have enough knowledge about viral hepatitis. 34% of the patients indicated that their families were not informed about this issue. 112 (43%) patients had never gone to an Infectious Disease or Gastroenterology Clinic for viral hepatitis. 65% of the patients had never received any treatment for viral hepatitis before. 54 patients currently received antiviral therapy. 64% of these patients thought that they would benefit from treatment.

DISCUSSION

In this study, we aimed to evaluate the awareness of these additional diseases in patients with viral hepatitis who underwent hemodialysis in different provinces in our country. We observed that the awareness of HD patients with viral hepatitis about this disease should be increased.

Table II: Demographic data of the patients.

Age (Years)	57 ± 13 (25-92)
Gender M/F(no)	162/98
Duration of Dialysis (Months)	133±111(3-304)
CRF Etiology(%)	
DM	18.4
HT	25.3
Glomerulonephritis	0.7
Other and unknown	55.6
Dialysed through	88% arteriovenous fistulae
Educational status	58 patients were illiterate,154 patients were primary school graduates, 40 patients were high school graduates, and 5 patients were university graduates 154 patients were primary school graduates, 40 patients were high school graduates, and 5 patients were university graduates
Hepatitis status	97 patients had hepatitis B, 154 (59.2%) patients had hepatitis C, and 8 patients had coexisting hepatitis B and C.

Unfortunately, the number of ESRD and HD patients in the world and in our country is increasing day by day. According to the 2010 TSN Registry Reports, there were approximately 50,000 HD patients in our country and the percentage of HBsAg (+) patients was 3.9 (6). At the end of 2016, the number of HD patients increased to 60,000, but there was no decrease in the number of patients with viral hepatitis. Our study revealed that the vast majority of patients developed viral hepatitis after hemodialysis. This makes it necessary that healthcare personnel and patients have knowledge about hepatitis and its preventive measures.

In our study, 241 (92%) patients knew that they themselves had viral hepatitis, and 224 of these patients knew which type of viral hepatitis they carried. 8% of the patients were not even aware that they themselves had viral hepatitis. When looking at the table, this rate is quite high. The fact that patients do not know that they have viral hepatitis creates an important contagious danger to their environment. Moreover, the fact that 34% of the patients indicated that their families were not informed about this issue is a major shortcoming. It should be known that informing the family is a basic rule in preventing the spread of viral hepatitis to other healthy people in the society. Therefore, these patients and their relatives should be absolutely informed by health personnel that the patients have viral hepatitis and which type of viral hepatitis the patients carry.

In our study, 55 (21.2%) patients acquired the hepatitis virus through dialysis machines, 39 patients acquired the hepatitis virus through blood transfusion, and 5 patients acquired the hepatitis virus through tooth extraction and filling procedures. The remaining patients indicated that they had no idea. These patients should also be given more detailed information about viral hepatitis transmission routes.

In our study, we have observed that patients were not aware of the problems which the hepatitis virus may cause in themselves and did not know whether viral hepatitis tests were regularly performed in dialysis centers. These issues should also be explained to patients by health personnel. If viral hepatitis-induced liver problems (cirrhosis, cancer, etc.) are explained in detail to patients, they can understand that they should be regularly followed up in this regard. Another important result of our study is that 112 (43%) patients had never presented to an Infectious Disease or Gastroenterology Clinic due to this disease. The most important task in this regard falls on physicians who follow up these patients. Thanks to referral to the relevant branches after the physician's evaluation, treatment may prevent the progression of liver damage in these patients.

The presence of viral hepatitis leads to additional psychological distress and worsens quality of life in these patients. About half of our patients also complained of psychological distress due to receiving dialysis in a separate room and/or dialysis machine. Some of these patients need psychiatric support in this regard.

As a result, HD patients with viral hepatitis must be aware of this disease and should be informed in detail regarding preventive measures and treatment possibilities.

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