ADVANCED TREATMENT OF PATIENTS WITH CHRONIC HEPATITIS C

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ABSTRACT

Introduction : Chronic hepatitis C is an infectious disease caused by a virus hepatotropen that its citopatogeno expresses action on hepatocytes , causing nekro - inflammatory process in the liver of a chronic nature .Cause of the disease is hepatitis C virus , which is a RNA virus belonging to the family Flaviviridae.

Objective: To determine the clinical characteristics of viral hepatitis C , especially in the modern treatment treatment , using relevant data are recorded and are available.

Material and Methods : This paper is a descriptive epidemiological study of hepatitis C virus in the territory of the Republic of Macedonia and Veles , for the period of 2002-2012 year.

Results and discussion : The results are presented in the paper represent a retrograde view of patients , hospitalized and treated for hepatitis C virus from 2002 to 2012 godina.po sex, age , place of residence, seasonal character , method of infection , number of patients on antiviral therapy and side effects of treatment.

Conclusion : There has been some progress in the understanding of the epidemiology , clinic , perfecting virological tests , especially in the effectiveness of treatment . Establishment of a network of health care facilities and competent teams for screening diagnosis and treatment of HCV infection in coordination with the Clinic for Infectious Diseases .

***Keywords** : virus , antigen , antibody , infection , disease , treatmentA*

Introduction

Chronic hepatitis C is an infectious disease caused by a virus hepatotropen that its citopatogeno action expresses the hepatocytes , causing nekro - inflammatory process in the liver of a chronic nature . **Objective:**Cause of the disease is hepatitis C virus , which is a RNA virus belonging to the family Flaviviridae.Source of infection is man , and the disease is transmitted through contact with infected blood or blood products .Patoanatomical changes are characterized by varying degrees of nekroinflamatorni changes , fibrosis and necrosis .

The disease can manifest from asymptomatic chronic hepatitis with mild , intermittent and non-specific symptoms to severe chronic forms ending in cirrhosis and hepatocellular carcinoma .

Diagnosis is based on clinical presentation , laboratory analysis , virological tests , ultrasound and liver biopsy .

Treatment is long and hard and consists of antiviral agents and liver transplantation . The introduction of combination therapy with pegylated interferon - alpha and new inhibitors of DNA polimerozata , significantly raises the possibilities for healing and HCV is considered a treatable disease .Because of the difficulties in treating the large number of patients , prevention is an important factor in the suppression of chronic hepatitis C .

Prevention is achieved by limiting the risk of transmission through screening of donated blood , using the methods of asepsis in medicine , detoxification of drug addicts , the use of condoms among homo and hetero sekcualcite etc. .

The prevalence of HCV in various parts of the world or prevalcencata is different and varies depending on geographical regions and population groups in a country. Today it is considered that 170 million or 3 % of the global population is already infected with HCV . To this group each year join another 3-4 million newly infected .

Source of infection of viral hepatitis C may be only human , and that only through his infected blood , and a small percentage through saliva and semen. Man as a source of infection can occur

during incubation before symptoms appear , and during the development and rekonvalencenicjata disease . Great importance for the maintenance and spread of viral hepatitis C has virus carrier.

Hepatitis C is transmitted only through contact with infected blood or blood products , and rarely by other types of contacts (even though the virus is present in saliva and semen) . This means that HCV is transmitted by the parenteral route ,sexually , and so on vertical gap .

Parenteral route of transmission is accomplished by receiving blood transfusions and blood products , including Factor VIII and imunoglobalini . This type of transmission in the past belonged to 85 % of cases , but with the introduction of rigorous control of blood and blood products transmission of infection has dropped to 0.6 %

Intravenous drug addicts who use a syringe more people have high incidence of infection with this virus (50-90 %) . Risk exists in nasal cocaine intake using a straw , thus damaging the nasal mucosa and , if you use two straw through bleeding from damaged mucosa with contaminated addict with hepatitis C virus is transmitted to other users who are infected .

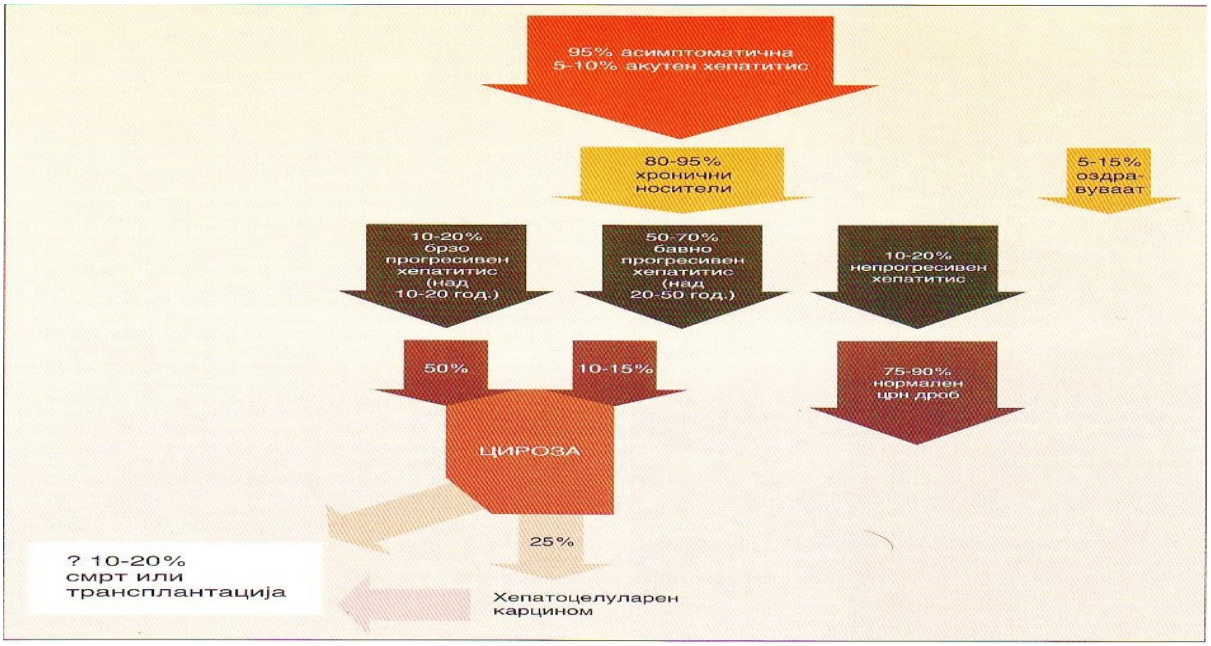
Hepatitis C is very common in patients on hemodialysis . Patients with immune - HBI insufficient, because it creates the conditions for a mild infection . In these patients there and occasionally anemia must be corrected by receiving blood and blood products , thereby creating the opportunity for infection . Unlike healthy population of these patients are 10 times more susceptible to infection .

The pathogenesis of HCV intertwine two components : viral replication and immune response against the patient's virus infection . Patohistological changes in HCV infection characterized by inflammation of the periportal space with lymphocytic aggregates .

Chronic hepatitis C is one of the most common chronic hepatitis. About 35 % of patients with acute hepatitis C, the virus evolved for 6 months , so there is a chronic form of hepatitis C virus .

Often the patients have no symptoms , and for those who have them, they are light, intermittent , nonspecific and include fatigue, anxiety , depression , anorexia , nausea , vomiting , mild pain below the right costal arch , diskonfor abdominal muscle and joint pain . Elevated ALT / AST may be discovered incidentally during screening , and can be the occasion for discovering detectable viraemia and HCV infection .

The risk of cirrhosis increases in cases of HCV infection in advanced age (45 th year .) , Alcohol consumption, co-infection with HIV or HBV . Coinfection with HIV increases the risk of sexual transmission of HCV , transmission from mother to child , and the risk of evolution to cirrhosis and HCC (1-4 %) .



Diagnosis is based on clinical , epidemiological data and laboratory tests . The clinical features , when accompanied by jaundice , is patognomichna for this disease and allows rapid diagnosis , although not itself sufficient .

Treatment of HCV consists of suppurative measures , antiviral agents and liver transplantation . It is recommended that standby allows blood circulation in the liver is gone , thus improving the nutrition of hepatocytes , reducing metabolic processes , reduces consumption of glycogen and allows better regeneration of hepatocytes .

Dietary measures and symptomatic treatment is useful for atenuiranje some of the symptoms , but do not affect its course . Forbidden to take any kind of medication , corticosteroids , dietary food and drinks . Interferons are a group of natural citoksini that are secreted by cells of the immune system of a mammal, when stimulated by a virus, bacteria , etc. .

The main objective of the paper is to determine the clinical characteristics of viral hepatitis C, especially in the modern treatment treatment , using relevant data are recorded and are available .

To realize this goal, applied a descriptive - epidemiological method, statistical processing and analysis of data .

The **results** are presented in the paper concerning the number of people suffering from viral hepatitis C for the period of 2002-2012 year . In ill following parameters were analyzed : gender, age , residence , occupation , seasonal character , way of infection , number of patients on antiviral therapy and side effects of treatment .

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MB/100.000	1.7	1.6	2.0	2.8	7.2	5.5	4.9	4.1	3.6	3.8	8.3
disease	35	33	41	57	145	111	99	83	72	76	166

1.In the table The number of cases of hepatitis C in Macedonia

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MB/100.000	1.2	10	6	10	4	24	16	10	6	28	10
disease	6	5	3	5	2	12	8	5	3	14	5

2.shows number of cases registered in the city of Stip

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MB/100.000	2	2	10	8	6	6	/	4	6	16	6
disease	1	1	5	4	3	3	/	2	5	8	3

3. number of hospitalized persons infectious Grade Stip Clinical Hospital

year	total	Men	Woman	total	Men	Woman Woman	total	M.	W.
2002	1,7	1,5	0,2	12	8	4	2	2	/
2003	1,6	1,3	0,3	10	6	4	2	/	2
2004	2,0	1,5	0,5	6	4	2	10	6	4
2005	2,8	2,2	0,6	10	6	4	8	6	2
2006	7,2	5,7	1,5	4	/	4	6	4	2
2007	5,5	4,5	1,0	24	18	6	6	4	2
2008	4,9	3,7	7,2	16	8	8	/	/	/
2009	4,1	3,3	1,8	10	6	4	4	2	2
2010	3,6	2,8	0,6	6	6	/	6	6	/
2011	3,8	3,0	0,8	28	16	12	16	10	6
2012	8,3	5,9	2,4	10	10	/	6	6	/
Total	45,9	35,6	10,3	136	88	48	66	46	20

4. Showing after sex and year

Discussion

The situation in the Republic. Macedonia, in terms of viral hepatitis C is estimated based on received cards prijavni acute infectious diseases received by the relevant institutions, such as Infectious departments inside Infectious Clinic and Clinic of Gastroenterology. You may notice that there is not registering or delayed reporting of this disease particularly in the interior and lack of adequate tests for its diagnosis. Therefore we think that the number of infected with hepatitis C is significantly higher than that with which we have (1.5-2% of the total population). Attached From a retrospective analysis of the number of cases of HCV in the Republic. Macedonia and the number of infected and hospitalized in the town of Stip, for the period 2002-2012 we can conclude that:

-The town of Stip, although there are fewer people, MB/100.000 of infected and 136 HCV is 2.9 times greater than MB/100.000 of infected HCV in R. Macedonia, which is 45.9. -MB/100.000 of infected HCV is higher in larger municipalities such as Skopje 7,4, Kumanovo 6.5, Bitola 5,2, Prilep 4.1,Veles 3.4 etc.

According to sex of patients in the Republic. Macedonia, we can note that the HCV affects both sexes, but that the disease prevalent among males with 712 (77.5%), compared to females, which is represented by 206 (22.5%).

-From the presented analysis of the age structure we observe that chronic hepatitis C in R. Macedonia is the most typical age group of 20-29 years MB/100 000 which equals 17.8, while in the town of Stip is the most typical age group of 50-59 years, which is 000 MB/100 40th.

-Through the analysis for the discovery of HCV infection after months, you may observe that in R. Macedonia and the town of Stip, chronic hepatitis C occurs throughout the year and has seasonal character.

Analysis of cases of HCV in the town of Stip, for the period 2002-2012, shows that 33 of the 63 infected patients sought help and were treated with antiviral therapy (pegylated interfelron - alpha 2a and ribavirin) for a period of 24-48 weeks , depending on the genotype of the disease. In the town of Stip, a total of 33 patients treated with special antiviral therapy, 20 of them with genotype 1 and 13 with genotype 3rd .

The analysis of the age structure, the treatment of HCV in Stip, we conclude that the dominant age group is 50-59 years, with 9 percent.

This age group is the most numerous, perhaps because of the long and quiet development of the disease. Immediately after that, followed by the age group of 20-29 years, with 8 patients, where the majority of patients at risk groups.

The way you got the infection treated patients, we noted that 13 of them are intravenous drug addicts, 11 recipients of blood and blood products, dialysis patients 4 and 5 are of unknown origin.

The analysis of adverse events were observed in all patients that present are: flu like symptoms, leukopenia, thrombocytopenia, and transaminase activity. During treatment, followed the success of therapy. We observe a high percentage of success (94%) of antiviral combination therapy, which commits future to enable a larger number of patients.

Conclusion -Chronic hepatitis C, as in the Republic. Macedonia and the whole world is social, socio-economic, health and therapeutic update this problem.The global and regional health problem work more national and international organizations, as well as WHO.Recent years some progress has been achieved in the understanding of the epidemiology, clinic, perfecting virological tests, especially in the effectiveness of treatment. However, to improve treatment outcomes in patients with chronic hepatitis C is necessary to make a new research, which will encourage immune control, using technology to make new drugs and treatment strategies, which in future will be reduce global problem, making the national program for prevention of HCV developed based on real situations, determined by field screening conducted by the competent health organizations.

Establishment of a network of health care facilities and competent teams for screening diagnosis and treatment of HCV infection in coordination with the Clinic for Infectious disase.In all cases of HCV be offered antiviral therapy pegylated interferon - alpha 2a and ribavirin, which gives us good therapeutic success with regular screening of their health.

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