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Virus hepatitis markers' distribution between the clinic of Georgian Institute of
Critical Care Medicine and medical personal
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There were studied 982 patients including 950 patients and 32 doctors, average and low medical personal. Age of patients was between 35-90 years and staff was between 27-65. basic diagnose in patients was hemorrhagic and ischemic insult, cardiac- blood vessel failure. Between the personal of critical care medicine, existence of A Hepatitis antibodies was ascertained in 65% and Hepatitis B antibodies- 9.4% that is an indicator of high contact with indicator. Between patients there was high index of contact parenteral hepatitis with viruses that can be explained by frequent illness (iatrogenic cases). By it's own it can be a reason and provocation for basic disease (insult, pneumonia, cardiac-blood vessel failure) and complications of them. Virus-type liver-out B hepatitis was revealed as a failure of glomerulonephritis and kidney failure and chronic hepatitis and cirrhosis caused by it are represented as the most dangerous complications of B Hepatitis.

Key words: hepatitis, markers, critical condition, patients, workers

Intraduction:Hepatitis can be caused by various reasons but most spread is a virus hepatitis. Hepatitis viruses have different biochemical and molecular signs and are described to distinct taxon. But all of them cause an illness of human. Liver's chronic diseases which contain B and C hepatitis are one of ten reasons of population's mortality. 170 million people are ill from C hepatitis and 350 million- B one.

In the present there are known the following group of viruses which cause hepatitis: A, B, C, D, E, F, G, TTV, SEN (so-called first line viruses) and hepatitis viruses such German Measles, cytomegaly, Epstein virus and parvovirus. And also other viruses of animals.

Dogs' hepatitis-adenovirus, mice-coronavirus, ducks'-enterovirus, monkeys'-flavivirus, cattle's-enzootic hepatitis-rift fever virus (2,3). from hepatitis viruses of A,B,C,D,E,F,G,TTV,SEN only 2- A and E are enteral infections and others are parenteral ones.

The purpose of research was to study hepatitis etiologic structure between patients of critical care medicine institute and personal.

Materials and methods: taking of blood was conducted from elbow vein. After centrifugation blood serum was utilized in analysis. In personal's blood there were defined A,B,C,D,E hepatitis markers. And in patients' blood- B and C hepatitis only. Analysis were implemented by means of immunoferment method according to generally ascertained methods and test-system instructions. There were used the following immunoferment test-systems.

HAV Ab	Vector Best	Russia (A hepatitis' antibodies)
HBSAg	Organics	Israel (B hepatitis superficial antigen)
Anti-HBcor(total)	Bio-RAD	USA (B hepatitis cardiac antigen's antibodies)
HCV Ab	BIOPRO	Italy (C hepatitis sum antibodies)
HDV Ab	Organics	Israel (D hepatitis sum antibodies)

HEV Ab Vector Best Russia (E hepatitis sum antibodies)

Research of patients was carried out by means of immunochromatographic combo-tests-Intech China in order to reveal HBSAg and HCV Ab and what refers to Anti Hbcor (total) with immunofermant analysis enlisting of results happened by means of immunofermant reader RAITO China 450-620 NM waves. Statistic elaboration of results was carried out in Microsoft Office Excel 2007 (Microsoft Corp. USA) program statistic 8.0 (stat.soft inc, USA) reliability was measured by usage of Student Criterion. Difference was trustworthy when it was $p > 0,05$

Results and discussion: Results are given by means of the following test:

Age	Amount of Analyzed	Amount of Positive Results					
		HAV Ab	HBSAg	Anti HBcor (total)	HCV Ab	HDV Ab	HE V Ab
25-35	8	-	-	-	-	-	-
36-50	8	5	-	-	-	-	-
50-60	8	8	-	3	-	-	-
Up 60	8	8	-	-	-	-	-
total	32	21	-	3	-	-	-

It seems that A hepatitis virus antibodies had 24 from 30 patients that is 65 % that is less that data received in 80ies of last century (1). At that time A hepatitis virus antibodies had 85% of healthy population. B hepatitis superficial antigen did not occur in workers and sum Anti Hbcor had 3 persons-9.4 % of researched. Other hepatitis markers did not revealed between personal.

Research results of patients' analysis are represented in the table 2

Table 2

Age	amount	Amount of Positive Results						note
		HBSAg		Anti HBcor (total)		HCV Ab		
		ABS	ABS	ABS	%	ABS	%	
35-50	50	5	10	15	30	5	10	2 cirrhosis
50-60	60	5	8.3	20	33.3	4	6.6	2 cirrhosis
61-75	280	7	2.5	29	10	4	5	5 (1 cirrhosis 4 hemor. insult)
76-85	385	10	2.6	48	12.5	4	1.1	8(1 cirrhosis, 7hemor. insult)
Up to 85	175	4	2.8	12	6.8	2	1.1	1 hemorrhagic insult
total	950	31	3.7	124	13.1	23	2.4	

As we see from the table, B hepatitis markers, namely, HBSAg and Anti HBcor (total) occur in patients of 35-50 age (accordingly 10 and 30%) and patients of age 50-60 (accordingly 8.3 and 33.3 %). In this group of age C hepatitis antibodies also occurred (10 and 6.6%). In the following age groups these data was reducing accordingly 2.8, 6.8 and 1.1%. from some point of view this data is similar to literature one but analysis of Anti HBcor (total) in critical patients was not implemented. And during the research of gastroenteral patients of this direction had a high content of this markers (7).

Consequently in the personal of critical care medicine institute existence of A hepatitis was ascertained in 65% and B hepatitis antibodies-9.4% that is a showing of high contact with virus. This can be explained by a frequent illness (iatrogenic examples) and by it's own it can be a reason of causing and complicating (virus B hepatitis liver-out form exists as glomerulonephritis and kidney failure)of the basic disease (insult, cardiac-blood vessels failure, pneumonia).

As for chronic hepatitis and cirrhosis these are considered to be the most acute complications of virus hepatitis. Activities against the epidemic carried out in recent years (strengthening control of hepatitis, acceptance of using single expense material) have reduced the showing of acute hepatitis but this problem is not solved in medicine.

Conclusion:distribution of chronic hepatitis antibodies between personal and patients indicate that A hepatitis is often in medical personal and in patients- parenteral hepatitis virus markers. In any case, these data is similar to researches of other clinics.

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ვირუსული ჰეპატიტების მარკერების განაწილება საქართველოს კრიტიკული
მედიცინის ინსტიტუტის პაციენტებსა და სამედიცინო პერსონალს შორის.
(კრიტიკული მედიცინის ინსტიტუტი, თბილისი, საქართველო)

გამოკვლევულ იყო 982 ადამიანი. რომელთაგანაც 950 პაციენტი იყო, 32 კი
სამედიცინო პერსონალი. პაციენტების ასაკი მერყეობდა 35-დან 90 წლამდე,
პერსონალისა კი 27-დან 65 წლამდე. პაციენტებში ძირითადი დიაგნოზი
წარმოდგენილი იყო ჰემორაგიული და იშემიური ინსულტის, სისხლის
მიმოქცევისა და სუნთქვის მწვავე უკმარისობის სახით. კრიტიკული მედიცინის
ინსტიტუტის პერსონალს შორის ჰეპატიტის ანტისხეულების არსებობა
დადგინდა გამოკვლევულთა 65 %-ში, ხოლო ჰეპატიტის ანტისხეულები
გამოვლინდა 9.4%, რაც ვირუსთან ხშირი კონტაქტის მაჩვენებელია. პაციენტებს
შორის კი აღინიშნებოდა პარენტერალური ჰეპატიტის ვირუსებთან ხშირი
კონტაქტი, რაც შეიძლება ძირითადი დაავადების პროვოცირების მიზეზი იყოს.