

NATURAL HISTORY OF HEPATITIS C VIRUS (HCV) INFECTION IN KOREAN HEMOPHILIACS

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SUMMARY

- 105 Korean hemophilic pts shows 38% HCV seropositivity due to the exposures to the products before the decontamination era
- Significant number of HCV seropositive pts (25%) showed a natural immunity to HCV without HCV treatment.
- HCV infections in hemophilic pts should be rigorously treated in early stage.

OBJECTIVES OF THE STUDY

- HCV infection in hemophiliacs is mostly due to the exposures to the contaminated coagulation factors used prior to the decontamination process era.
- To analyze the natural history of HCV infection with respect to the response to HCV treatment and, the rate of natural Immunity against HCV infection in a 105 Korean hemophilic cohorts.

MATERIALS and METHODS

- 105 Korean hemophilic patients, of whom 40 were HCVab positive (38% HCV seropositivity). Their median age of HCV seropositive pts was 40 yrs with ranges between 26 and 64. Only one of 104 hemophilic pts was HIV positive undergoing antiviral treatment.

RESULTS

Table 1. HCV antibody status in 105 hemophilic pts

HCV ab status	Total	HCVab-	HCVab+	P value
No. of pts (%)	105	65 (62%)	40 (38%)	-
Age±S.D. (yrs)	28±16.1	20±10.4	42±7.6	<0.001

- In this 105 hemophilic cohort HCV seropositivity was 38%
- The HCV seropositive group was older than the seronegative group (mean age 42 yrs vs. 20 yrs, P<0.001)
- This finding indicates that HCV seropositivity was due to the older factor VIII exposures before the era of sterilization.

Table2. HCVab+ (seropositive pts) and their HCVrna status

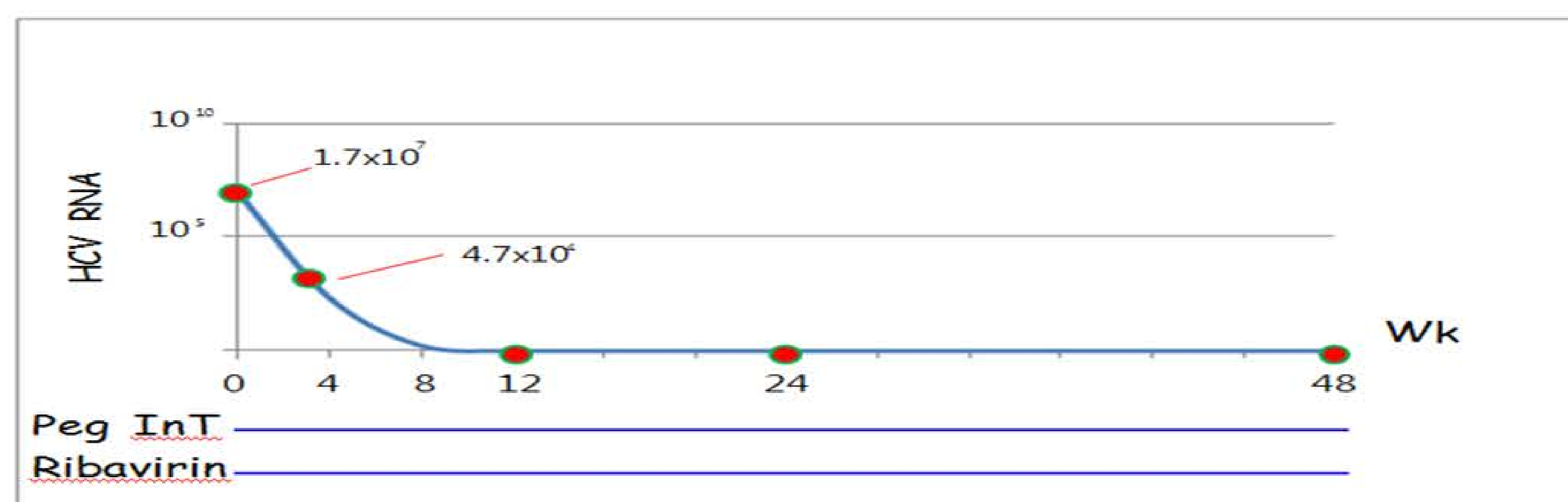
	Total	HCVrna+	HCVrna-	
No of pts (%)	40	5	35	
HCV Rx status			HCV treated	HCV never treated
No. of pts (%)	35		25 (65%)	10 (25%)

- Of 40 HCV seropositive pts 5pts remains HCV active infection, 35 are virus free; 25 with HCV treatment.
- 10 of 40 (25%) HCV seropositive pts never treated for HCV and therefore, naturally acquired immunity.

Table 3. Five HCV infected pts (HCVrna+)

Pt	Age (yrs)	Factor def	HCV ab	HCV rna (IU/ml)	HCV genotype	Course
1	38	VIII	+	4.7X10 ⁴	1b	Rxed, in remission
2	35	VIII inhibitor	+	6.8X10 ⁶	1b	Not Rxed, cirrhosis
3	64	VIII inhibitor	+	5.3x10 ³	2a	Not Rxed, hepatoma
4	48	VIII inhibitor	+	1.7x10 ⁶	4a	Not Rxed
5	37	VIII inhibitor	+	1.6x10 ⁷	1b	Not Rxed

Fig 1. A course of HCV Rx with peg-interferon and Ribavirin (Pt 1 in table 3)



Pt 1 was treated with 48 wks course of peg-interferon and Ribavirin, achieved rapid clearance of virus in 12 wks, and remains in complete remission. Other 4 pts not treated; 1 with hepatoma, 1 cirrhosis, 2 reluctance to Rx.

CONCLUSIONS

- 105 patient Korean hemophilic cohort shows 38% HCV seropositivity and HIV co-infection was rare.
- HCV infected with HCVab+ and HCVrna (+) have favorable response and durable remission to the interferon-containing regimen.
- Significant number of HCV seropositive pts (10 of 40 pts, 25%) acquired without HCV Rx, thereby natural immunity to HCV.
- Hemophilics who are HCV infected with HCV seropositive and HCVrna (+) should be rigorously treated in early stage of the infection to avoid the late sequelae of HCV infection.
- Newer oral HCV regimen would make HCV therapy easier in those who are reluctant to interferon regimen.

