

TABLE 3: Univariate and multivariate analysis of the factors associated with SVR to peginterferon alfa-2b and ribavirin therapy.

		Univariate analysis		Multivariate analysis	
		P	RR (95% CI)	P	RR (95% CI)
Age	<57 years	0.646	1.24 (0.50–3.09)		
Sex	Female	0.634	0.80 (0.33–1.97)		
BMI	≥23 kg/m <sup>2</sup>	0.221	1.86 (0.69–5.02)		
Underlying liver disease					
	CH	0.872	1.15 (0.21–6.32)		
WBC	≥5100 /μL	0.827	0.75 (0.37–2.22)		
Hb	≥14.0 g/dL	0.317	0.62 (0.25–1.58)		
Plt	≥20 × 10 <sup>4</sup> /μL	0.112	2.10 (0.84–5.24)		
AST	<40 IU/L	0.429	1.44 (0.58–3.55)		
ALT	<52 IU/L	0.649	1.23 (0.50–3.02)		
γ-GTP	<35 IU/L	0.525	0.75 (0.30–1.83)		
TC	≥177 mg/dL	0.008	3.77 (1.41–10.05)	0.015	18.59 (1.78–193.65)
TG	≥88 mg/dL	0.101	2.60 (0.83–8.13)		
LDL-C	≥98 mg/dL	0.028	4.91 (1.19–20.23)	0.800	1.25 (0.22–7.01)
Stage	F 3-4	0.419	0.60 (0.17–2.07)		
Grade	A 2-3	0.809	1.13 (0.41–3.18)		
HCV RNA	<1000 KIU/mL	0.310	1.65 (0.63–4.31)		

Relative risk (RR); 95% confidence interval (95% CI).

TABLE 4: Comparison between HCV patients with high and low serum TC.

TC	<177 mg/dL	(Range or %)	≥177 mg/dL	(Range or %)	P value
Total	50		50		
Age (y.o.)	57	(24–78)	57	(36–69)	NS
Sex (%)					
Male	34	(68)	20	(40)	
Female	16	(32)	30	(60)	0.005
BMI (kg/m <sup>2</sup> )	21.5	(18.4–26.8)	23.5	(15.4–30.6)	0.027
WBC (/μL)	5100	(2100–9730)	5100	(3000–8300)	NS
Hemoglobin (g/dL)	14.2	(10–16)	13.9	(10–16)	NS
Platelet (10 <sup>4</sup> /μL)	17.6	(7.3–26.5)	21.7	(6.9–26.1)	NS
AST (IU/L)	48	(17–377)	33	(18–199)	0.033
ALT (IU/L)	67	(16–751)	40	(11–283)	NS
TG (mg/dL)	83	(46–203)	111	(43–262)	NS
<88 mg/dL (%)	32	(63)	19	(38)	
≥88 mg/dL (%)	18	(37)	31	(62)	0.045
LDL-C (mg/dL)	84	(43–118)	121	(30–167)	<0.001
<98 mg/dL (%)	40	(79)	9	(19)	
≥98 mg/dL (%)	10	(21)	41	(81)	<0.001
HCV RNA (KIU/mL)	1000	(20–24200)	2670	(20–40900)	0.029
Distribution of stage of fibrosis (%)					
1	18	(36)	25	(50)	
2	7	(14)	10	(20)	
3	8	(16)	3	(6)	
4	2	(4)	2	(4)	
Unknown	15	(30)	10	(20)	NS
Distribution of grade of inflammation (%)					
1	20	(40)	19	(38)	
2	14	(28)	20	(40)	
3	1	(2)	1	(2)	
Unknown	15	(30)	10	(20)	NS

Data are median (range) or frequency (%).

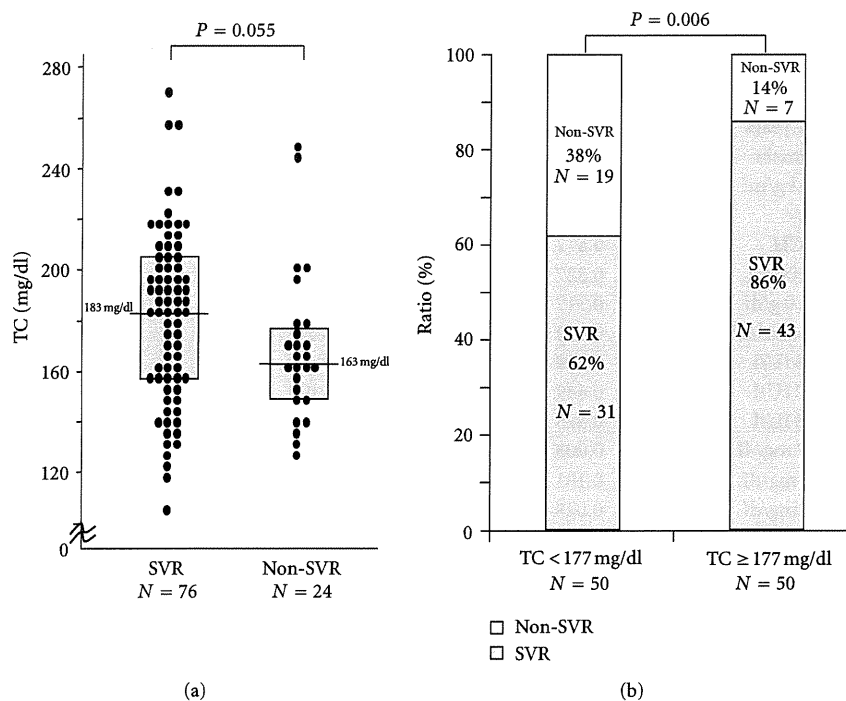


FIGURE 1: Comparison between SVR rate in patients with high serum TC levels ( $\geq 177$  mg/dL) and patients with low serum TC levels ( $< 177$  mg/dL) in HCV genotype 2 patients.

between IL28B genotypes and LDL cholesterol concentrations. As discussed above, we cannot exclude the possibility that high cholesterol levels in patients with HCV only reflect the presence of the IL28B major allele. It may simply reflect the wild-type sequence at core amino acid 70 because substitution in the core protein correlated significantly with a low concentration of LDL cholesterol [30, 31]. However, we could not identify IL28-B and core amino acid 70 as predictive for our patients with HCV genotype 2 because our sample population was limited.

Petta and Craxi reported that age, sex, stage of fibrosis, and baseline viral load were important predictive factors SVR in patient with HCV genotype 2 [32]. However, our study was not significantly different in these factors for SVR. Furthermore, there was no significant difference in the serum TC between SVR and non-SVR by the Mann-Whitney *U* test. The reason may be explained as follows: severe stage of fibrosis (F3-4) was recruited only 15%, and 25% was stage unknown in this study. HCV RNA in high TC group was significant higher than low TC group. Finally, this was the limitation small sample size and retrospective study. The discrepancies of the observation from different reports need further investigation.

In conclusion, our data suggest that baseline serum total cholesterol levels should be considered when assessing the likelihood of sustained treatment response following PEG-IFN and ribavirin therapy in patients with chronic HCV genotype 2 infection. However, this finding requires further analysis.

## Conflict of Interests

The authors declare that they have no conflict of interests and financial support.

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