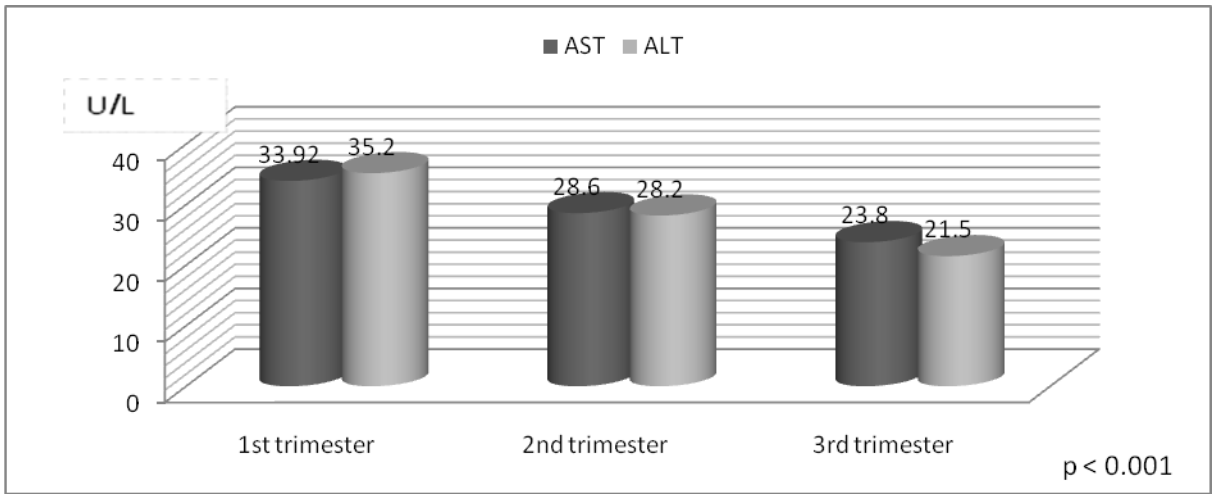
Table (1): Characteristics of the studied groups.

Characteristic (Mean ± SD)		Case group		Control groups		
		Pregnant HCV – positive (n = 26)		Pregnant HCV- Negative (n = 10)	Non pregnant HCV – positive (n = 10)	Non pregnant HCV – negative (n = 10)
Age (Years)		27.9 ± 3.8		29.8 ± 3.9	26 ± 5,2	32.6 ± 6.2
Gestational age		37.6 ± 2.4		38.2 ± 2.1	------	------
Hb (gm/dl)		10.92 ± 0.958		11.92 ± 0.97	11.8 ± 0.7	11.7 ± 0.93
Platelet		268077 ± 61710		278077 ± 62710	251177 ± 65410	292077 ± 63110
WBCs		5720 ± 1420		6100 ± 1890	6780 ± 1730	4950 ± 1040
R.Bl.S (mg/dl)		94.85 ± 24.506		96.58 ± 25.52	94.85 ± 23.53	97.85 ± 23.51
S.Creatinine (mg/dl)		0.697 ± 0.1254		0.797 ± 0.13	0.79 ± 0.2	0.79 ± 0.13
AST (U/l)		1^{ST}Trimester	33.92 ± .78	25 ± 7.1	69.4 ± 19.8	24.9 ± 7
		2^{nd}Trimester	28.6 ± 8.5			
		3^{rd}Trimester	23.8 ± 6.0			
ALT (U/l)		1^{ST}Trimester	35.2 ± 7.7	25.4 ± 5.4	52.00 ± 14.6	20.22 ± 3
		2^{nd}Trimester	28.2 ± 6.2			
		3^{rd}Trimester	21.5 ± 5.9			
S.IFN- α (pg/ml)		Early 2^{nd} Trimester	22.1 ± 15.3		18.3 ± 7.5	19.4 ± 10.8
		Late 3^{rd} Trimester	39.1 ± 30.0	16.45 ± 13.6		
HCVRNA (IU/ml)		Early 2^{nd} Trimester	265858 ± 293083	--------	---------	--------
		Late 3^{rd} Trimester	315785 ± 564668			
		No.		No.		
Parity	Primi-Gravida	14 (53.8%)		3 (30%)	------	-------
	Multi-Gravida	12 (46.2%)		7 (70%)	-------	-------
Mode of delivery	CS	11 (42.3%)		4 (40%)	-------	--------
	NVD	15 (57.7%)		6 (60%)	-------	--------

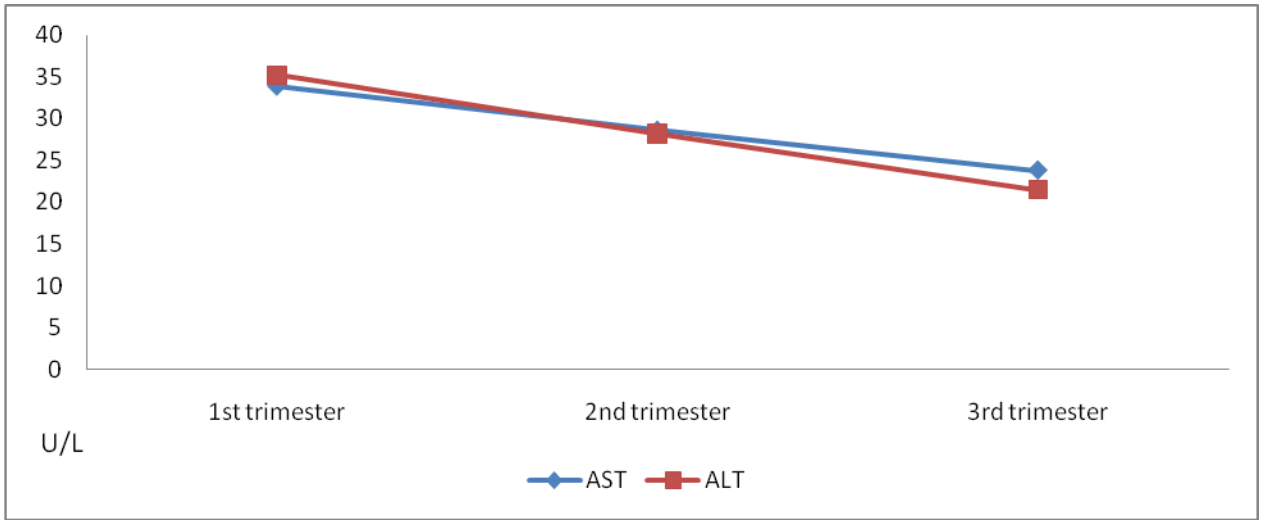
CS = Caesarian Section **NVD = Normal Vaginal Delivery.**

Fig. (1): Monitoring of AST and ALT serum levels throughout the 3 trimesters in the studied pregnant women (cases) with chronic hepatitis C.



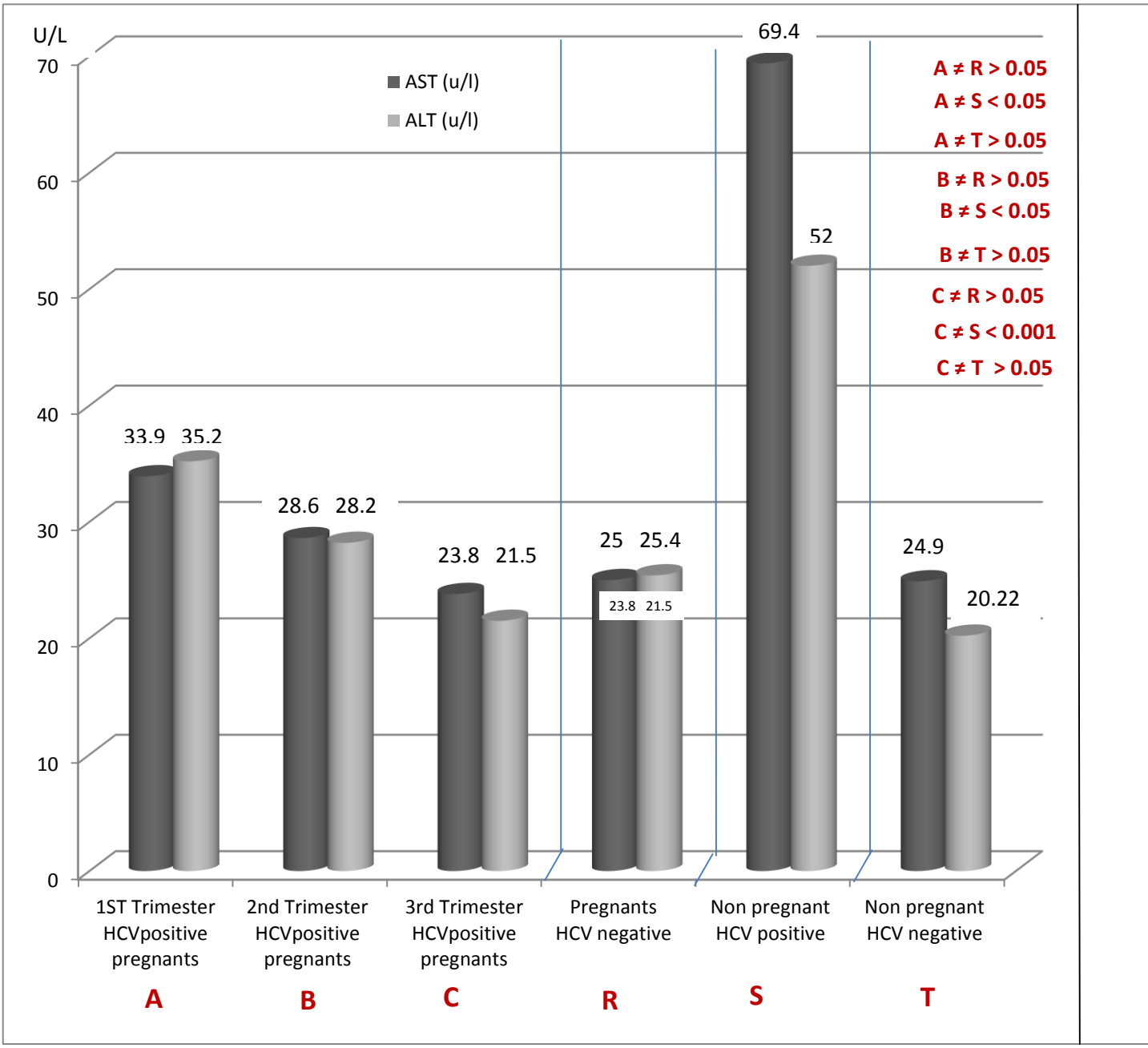
There was a highly significant decrease in transaminases levels when assessed in the 1st, 2nd and 3rd trimesters in the studied cases with chronic hepatitis C.

Fig. (2): Correlation between AST and ALT serum levels and pregnancy duration in the studied cases with chronic hepatitis C.



There was a statistically highly significant negative correlation between serum transaminases and pregnancy duration. Both were similarly decreasing as pregnancy was progressing.

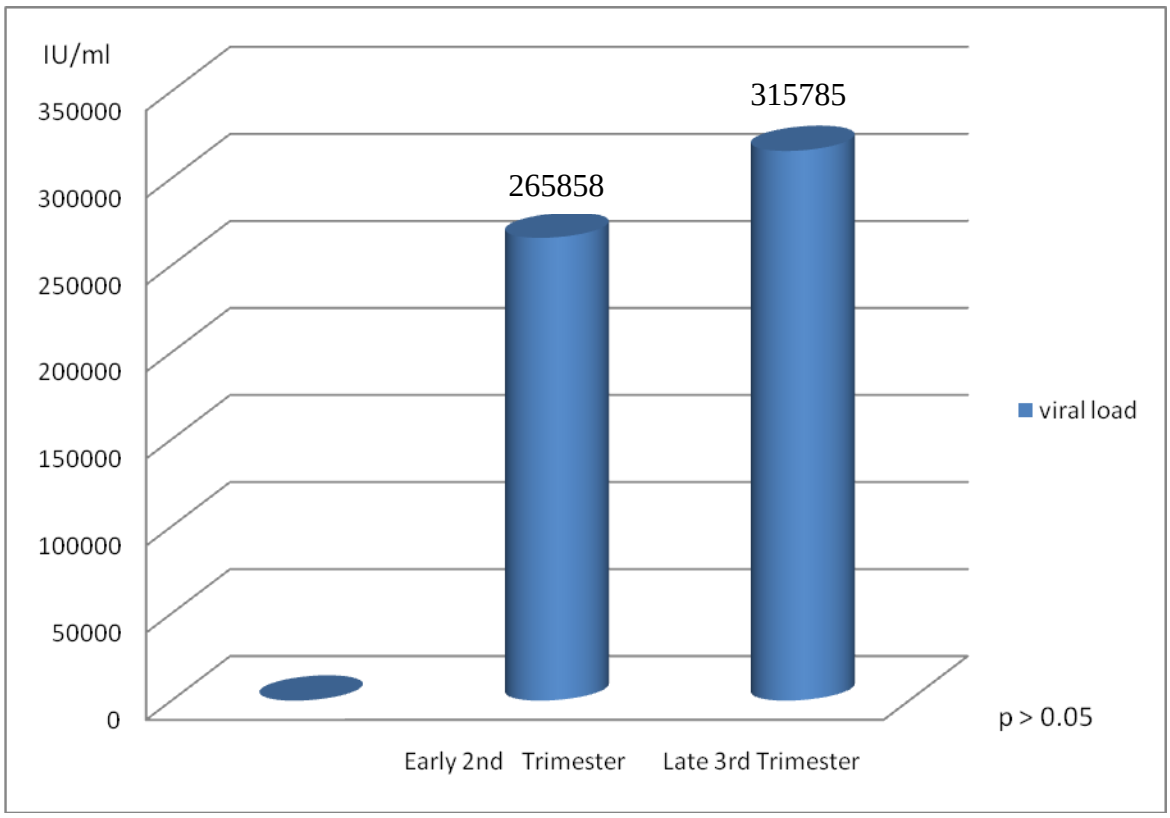
Fig. (3): Comparison between AST and ALT levels in the studied groups.



In the 3rd trimester, pregnant women with chronic hepatitis C **(C)** had serum transaminases levels comparable to those of the studied healthy pregnant and non pregnant women without hepatitis C **(R & T)** with no statistically significant difference.

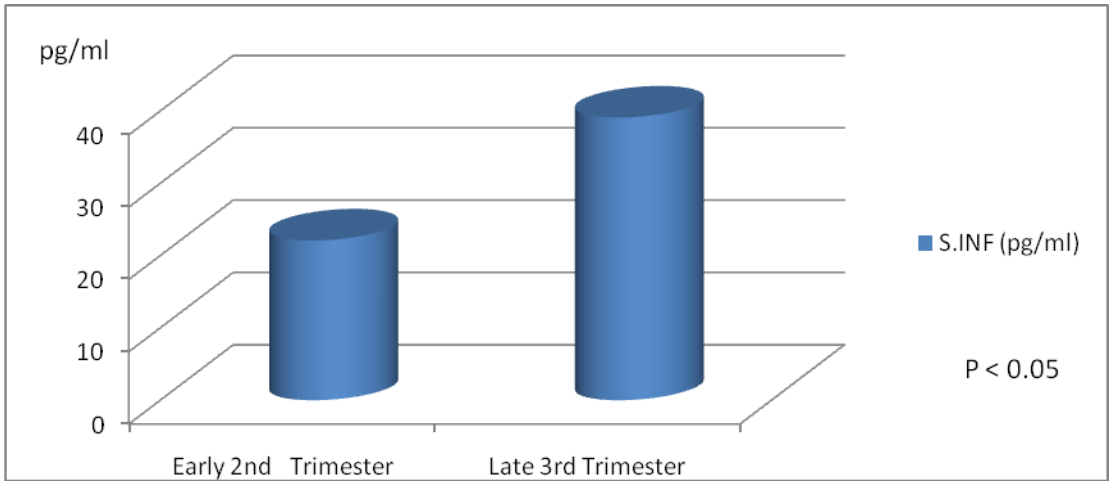
Non pregnant women who were HCV- Ab +ve **(S)** showed the highest transaminases level. This was highly significant when compared to that of the cases group in the 3rd trimester **(C)** and statistically significant when compared with that measured in the 1st and 2nd trimesters in the cases group **(A & B)**, while it was of no statistical significance when compared with that of the other two control groups **(R & T)**.

Fig. (4): Comparison between HCV- RNA viral load in early 2nd and late 3rd trimesters in the studied cases with chronic hepatitis C.



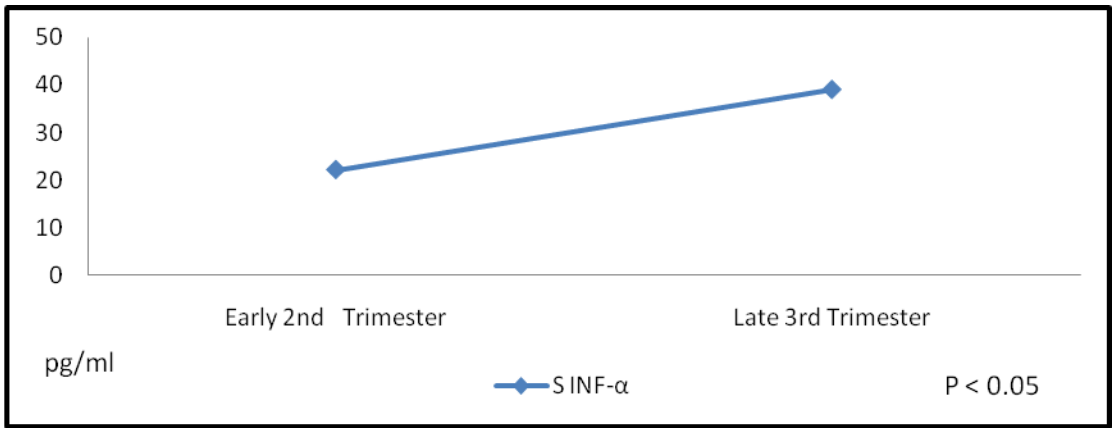
There was no statistically significant difference between HCV-RNA viral load assessed in early 2nd and late 3rd trimesters in the studied cases with pregnant group .

Fig. (5): Serum endogenous IFN- α level in early 2nd and late 3rd trimesters in the studied cases with chronic hepatitis C.



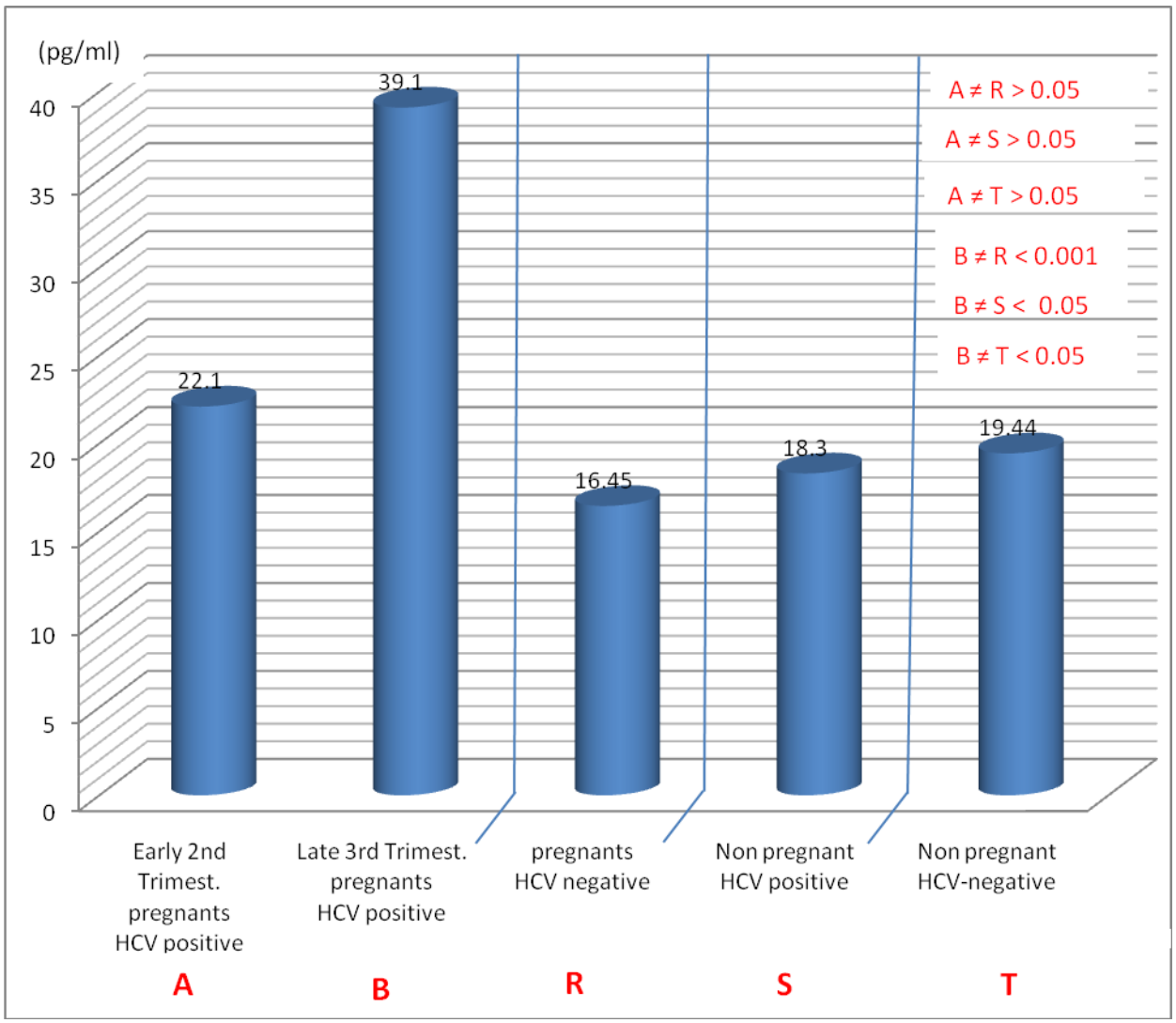
There was a statistically significant increase in serum endogenous IFN-α level measured in late 3rd compared to that in early 2nd trimester in the studied cases with chronic hepatitis C.

Fig. (6): Correlation between serum endogenous IFN-α levels and pregnancy duration in the studied cases with chronic hepatitis C.



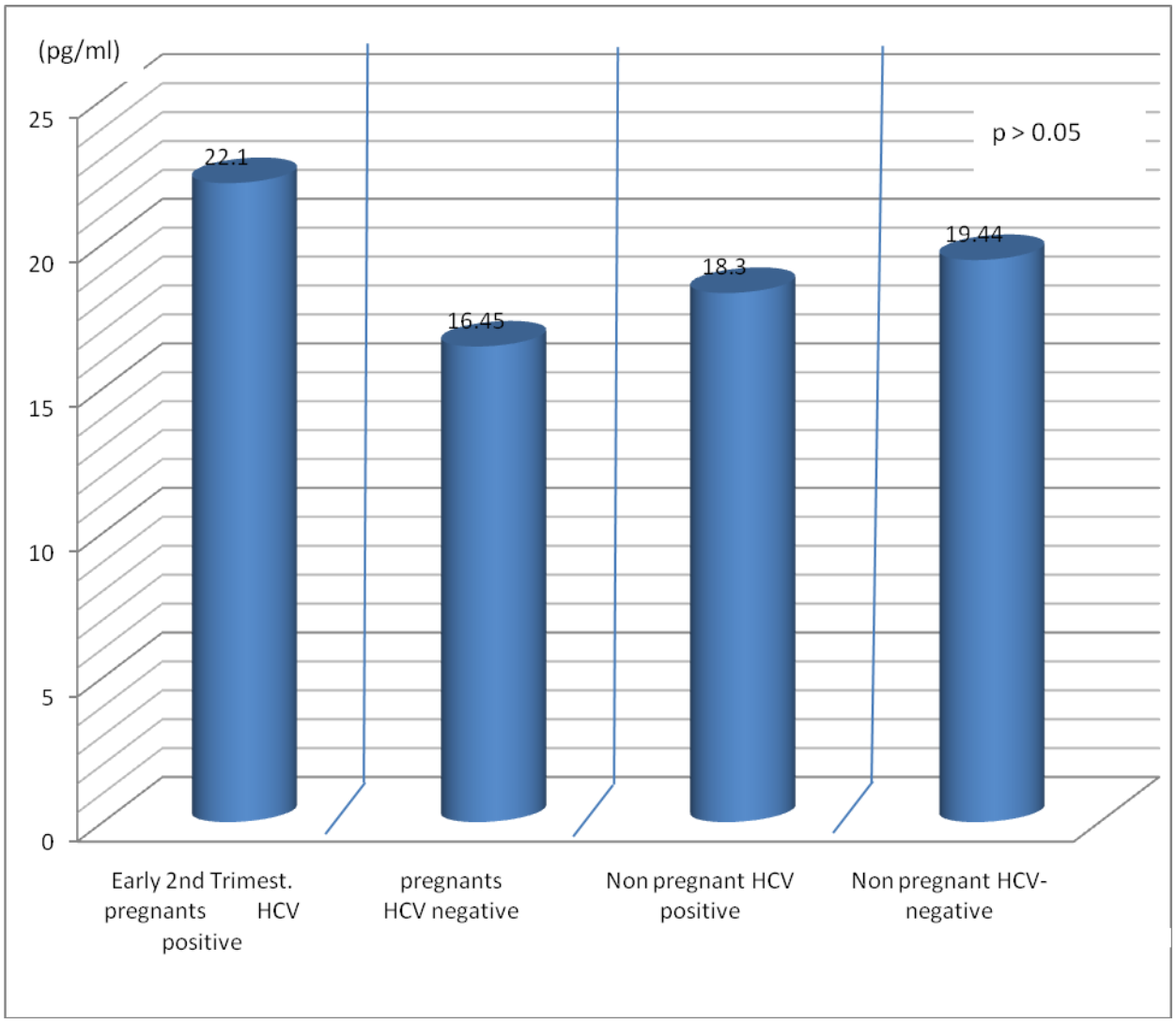
There was a statistically significant positive correlation between serum endogenous IFN-α level and pregnancy duration in the studied cases with chronic hepatitis C.

Fig. (7): Comparison between serum endogenous IFN-α levels in the studied groups.



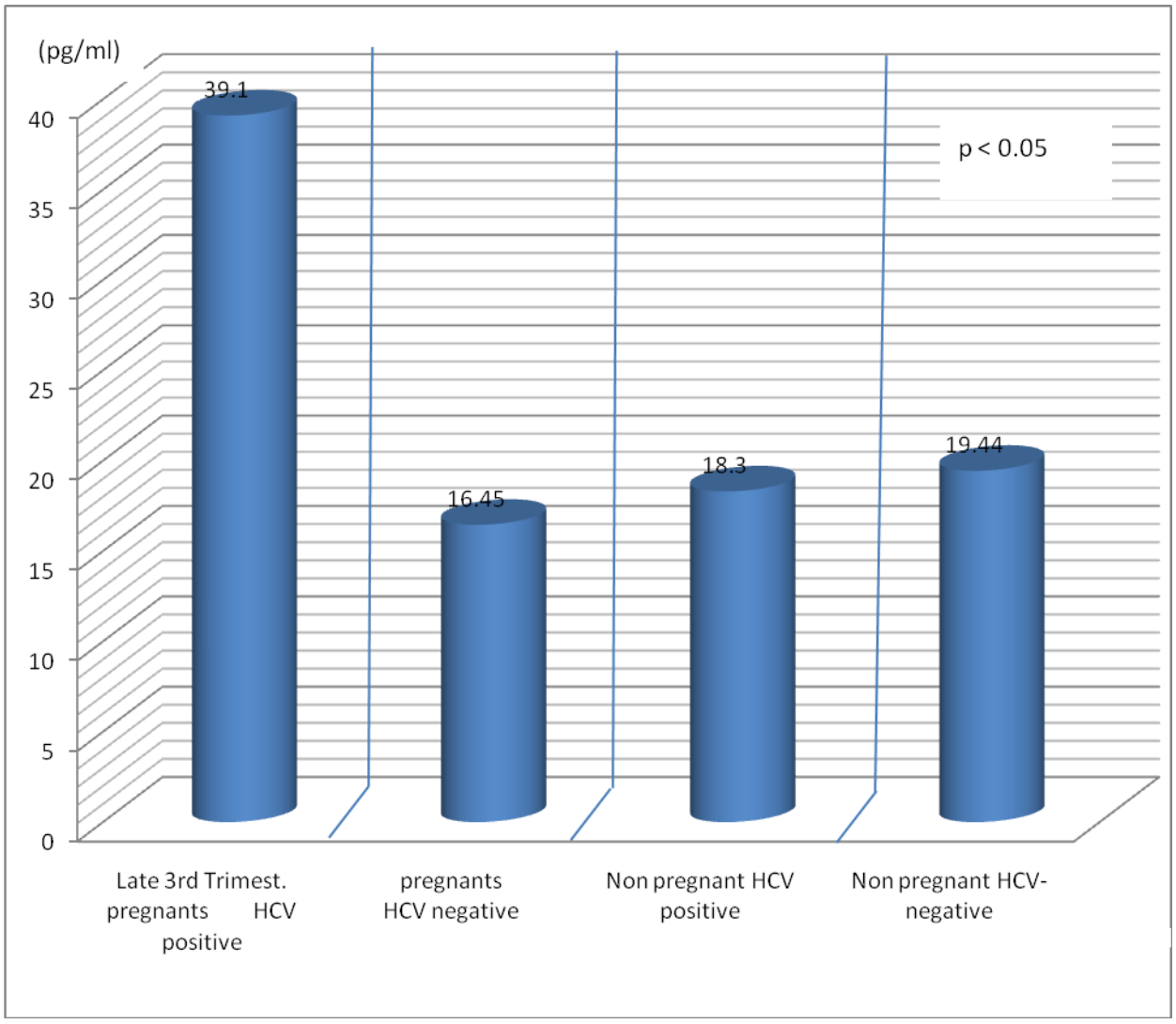
Serum endogenous IFN-α was significantly higher in the studied cases when measured in late 3rd trimester **(B)** compared to its level in the studied non pregnant groups **(S&T)**. This increase was highly significant when compared to pregnant women without HCV **(R)**. On the other hand, there was no statistically significant difference between serum endogenous IFN-α level measured in the studied cases in early 2nd trimester **(A)** compared to the studied 3 control groups **(R, S & T)**.

Fig. (7a): Comparison between serum endogenous IFN-α level in early 2nd trimester in the studied cases group and that in the 3 control groups.



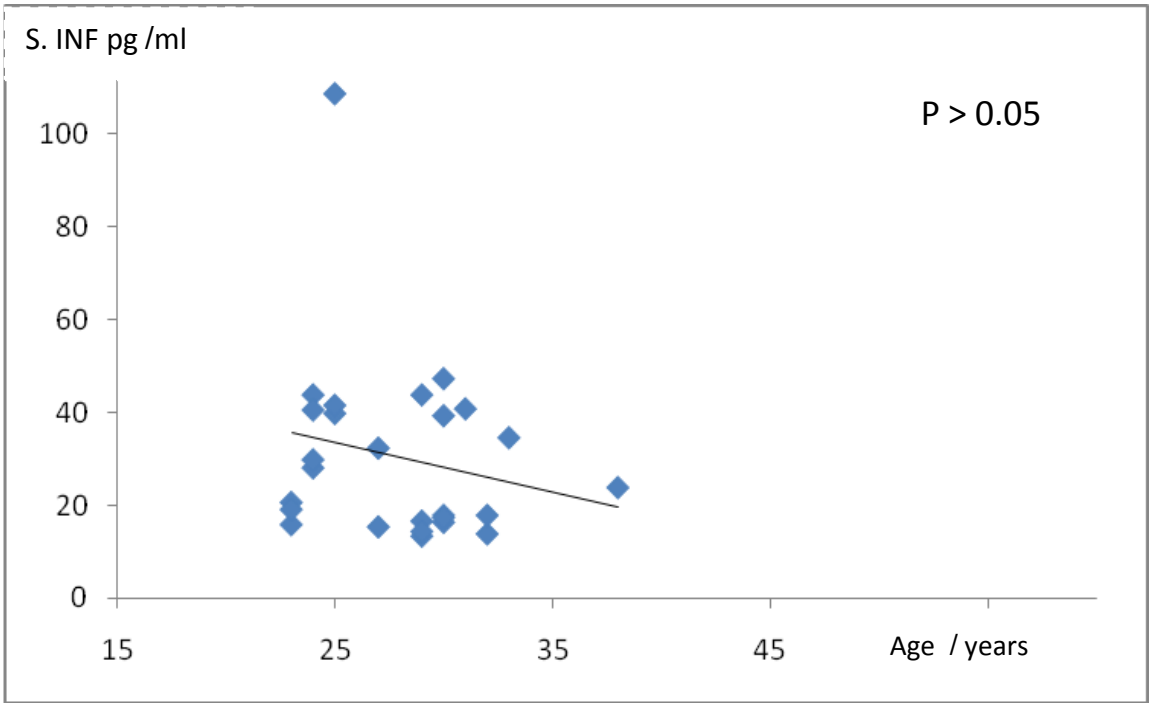
There was no statistically significant difference between serum endogenous IFN- α level measured in the studied cases in early 2nd trimester compared to its level in the studied 3 control groups.

Fig. (7 b): Comparison between serum endogenous IFN- α level in late 3rd trimester in the studied cases group and that in the 3 control groups.



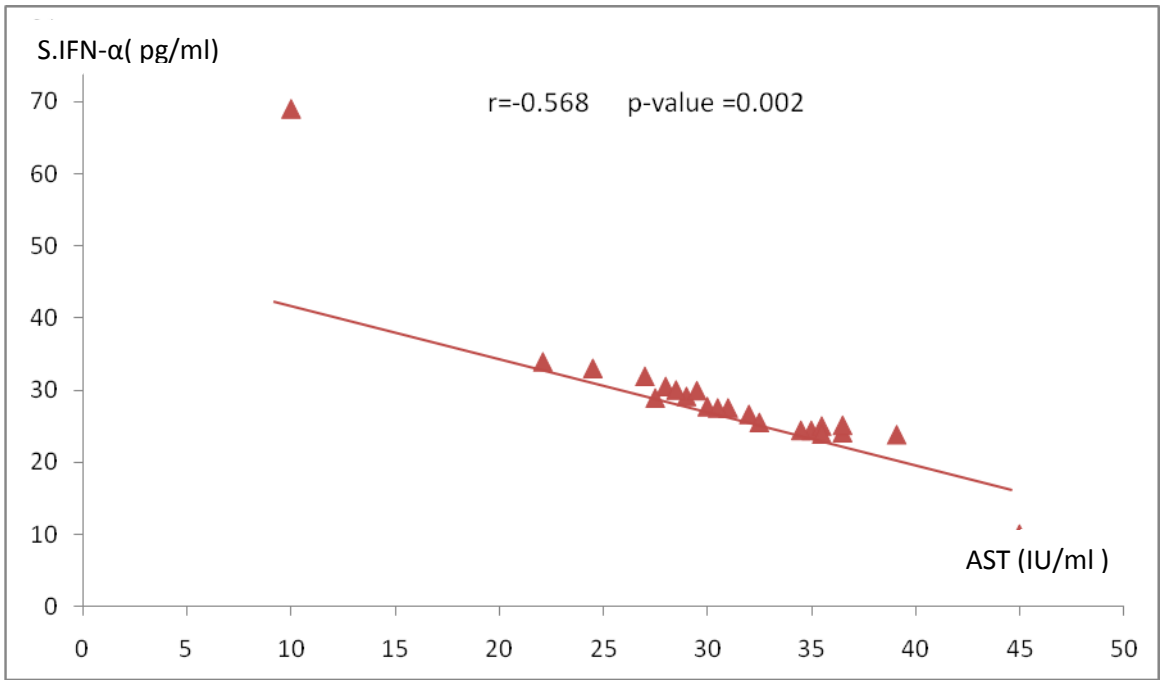
Serum endogenous IFN-α level was significantly higher (p< 0.05) in the studied cases when measured in late 3rd trimester compared to its level in the studied non pregnant groups. This increase was highly significant (p< 0.001) when compared to pregnant women without HCV.

Fig. (8): Correlation between Age and serum endogenous IFN-α levels in the studied cases with chronic hepatitis C.



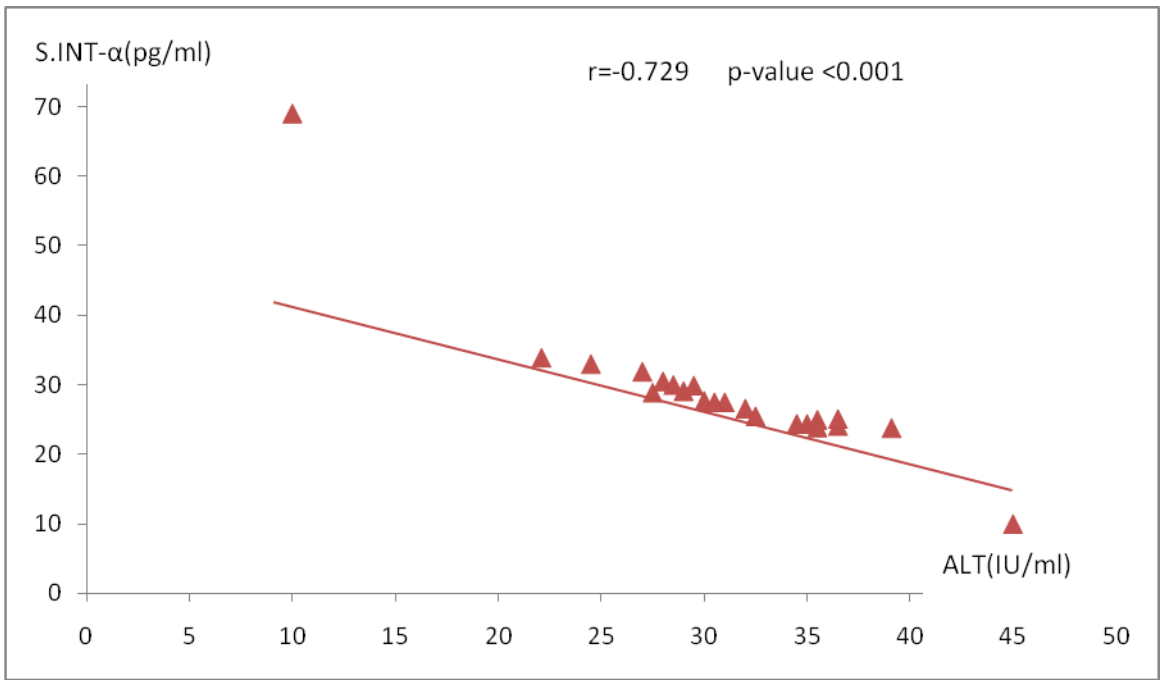
Age has no statistically significant impact on serum endogenous IFN– α level in the studied pregnant women with chronic hepatitis C (despite negative correlation).

Fig. (9): Correlation between serum endogenous IFN- α and AST level in the studied cases with chronic hepatitis C.



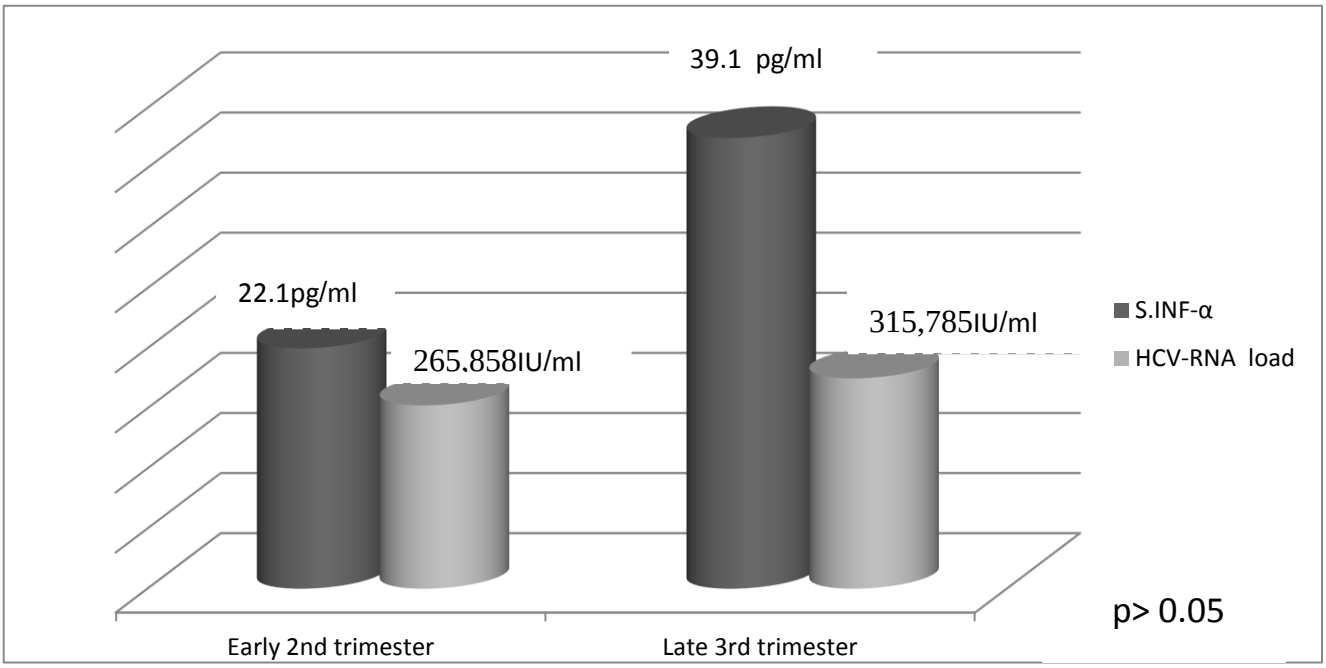
There was a statistically significant (P< 0.05) negative correlation between serum endogenous IFN- α and AST levels in the studied cases with chronic hepatitis C (AST was lower in those with higher endogenous IFN- α levels).

Fig. (10): Correlation between serum endogenous IFN- α and ALT in the studied cases with chronic hepatitis C.



There was a statistically highly significant (P< 0.001) negative correlation between serum endogenous IFN- α and ALT levels in the studied cases with chronic hepatitis C (the higher the endogenous IFN- α the lower the ALT level).

Fig. (11): Relationship between serum endogenous IFN-α levels and HCV- RNA load in the studied cases with chronic hepatitis C.



There was no statistically significant relationship between serum endogenous IFN-α levels and HCV- RNA load in the studied cases pregnants.