

Table (1): Selenium concentration of study populations (case – control)

Variable	Controls	Cases	P value
Selenium concentration Mean $\pm$ SD ($\mu\text{g/L}$)	84.45 $\pm$ 11.85	43.34 $\pm$ 11.41	<0.0001

Table (2): Comparison of serum selenium in the studied groups

Variable	Controls (n =20)	Chronic HBV (n =15)	Chronic HCV (n =15)	Liver cirrhosis (n =30)	HCC (n =20)
Selenium concentration Mean $\pm$ SD ($\mu\text{g/L}$)	84.45 $\pm$ 11.85	46.47 $\pm$ 7.03	49.73 $\pm$ 9.55	47.9 $\pm$ 6.19	29.35 $\pm$ 9.98
P vs. controls		<0.0001	<0.0001	<0.0001	<0.00001
P vs. HBV	<0.0001		1.00	1.00	<0.0001
P vs. HCV	<0.0001	1.00		1.00	<0.0001
P vs. LC	<0.0001	1.00	1.00		<0.0001
P vs. HCC	<0.0001	<0.0001	<0.0001	<0.0001	

Table (3): Univariate regression analysis of factors affecting Selenium concentration

Variable	Regression coefficient (95% confidence interval)	P value
<u>Group</u>		
HBV	-39.78 (-46.29:-33.28)	<0.0001
HCV	-34.25 (-40.77:-27.73)	<0.0001
LC	-46.24 (-69.92:-22.56)	<0.0001
HCC	-71.10 (-95.15:-47.06)	<0.0001
<u>Child score</u>		
A	13.75 (-3.37:30.87)	0.12
B	5.71 (-3.75:15.16)	0.23
C	12.22 (-2.24:28.72)	0.11

Jaundice	7.08 (-0.67:14.83)	0.07
Ascites	8.28 (-1.33:17.91)	0.09
Bleeding tendency	-6.11 (-13.16:0.94)	0.09
Hepatic encephalopathy	0.90 (-6.54:8.34)	0.81
Hematemesis	-0.98 (-7.50:5.54)	0.77
Total bilirubin	-0.14 (-4.73:4.44)	0.95
ALT	0.11 (-0.03:0.25)	0.13
AST	-0.03 (-0.13:0.06)	0.68
Albumin	0.14 (-4.86:5.14)	0.96
PC	0.04 (-0.20:0.28)	0.74
AFP	0.01 (-0.006:0.02)	0.31
HB	-0.34 (-1.85:1.16)	0.65
PLTs	-0.02 (-0.07:0.03)	0.49

Table (4): Final model of multivariate regression analysis of factor affecting Selenium concentration

Variable	Regression coefficient (95% confidence interval)	P value
Group		
HBV	-38.33 (-44.46:-32.21)	<0.0001
HCV	-34.72 (-40.80:-28.63)	<0.0001
LC	-37.01 (-45.58:-28.43)	<0.0001
HCC	-56.38 (-65.79:-46.96)	<0.0001