

**TABLE ( 6 ) :DEMOGRAPHIC DATA OF STUDY POPULATION**

<b>Total number of case</b>	<b>50</b>
<b>Hyponatremic</b>	<b>27(54%)</b>
<b>Non hyponatremic</b>	<b>23(46%)</b>
<b>Male : female ratio</b>	<b>23;27</b>

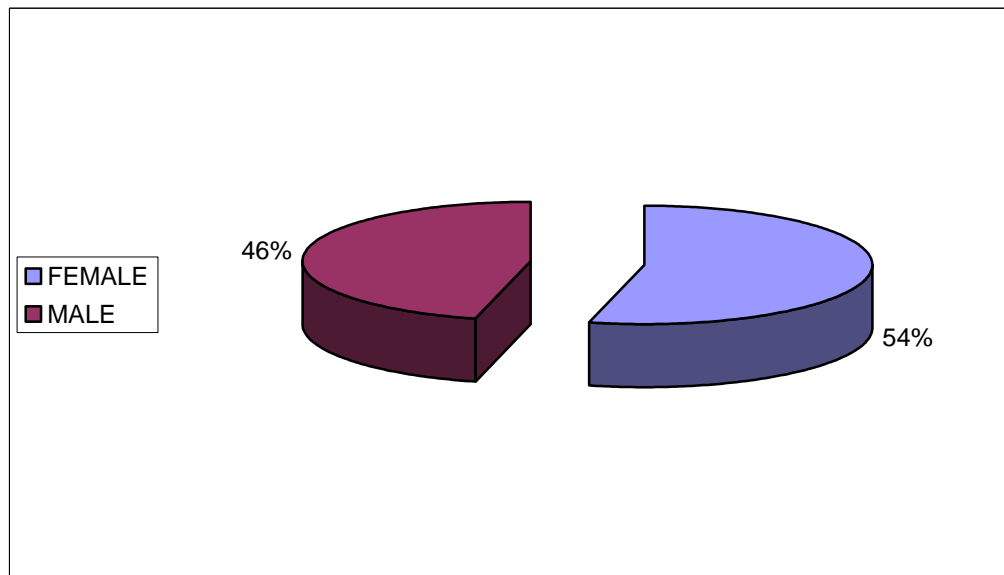
**FIG ( 1 ) : Sex distribution among study population**

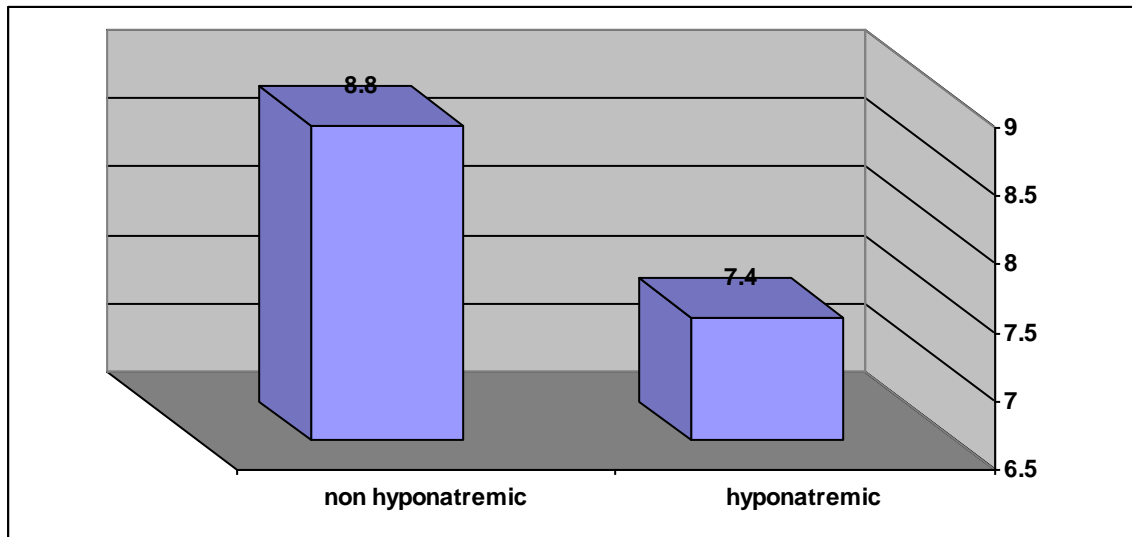
TABLE ( 7 ):CLINICAL &amp; LAB PROFILE OF STUDIES CASES

Total number of case	50
Mean of age ( months & years )	$1.1 \pm 0.6$
Mean Sodium ( mmol/l)	$133.42 \pm 3.446915$
Mean Glucose ( mg/dl )	$102.84 \pm 21.91669$
Mean Temperature (°c )	$38.614 \pm 0.683332$
Mean WBCs (number/ $\mu$ l)	$15905.6 \pm 11414.4$
Mean Neutrophils ( % of WBC )	$66.12 \pm 23.2569$
Mean HB ( g/dl)	$10.886 \pm 1.213194$
Mean platelets ( number / $\mu$ l )	$291.46 \pm 103.724$
Mean CRP ( mg/ l)	$55.1 \pm 22.92245$
Mean ESR ( mm/h )	$21.9 \pm 12.2745$
Mean BUN ( mg/ dl )	$21.28 \pm 7.505209$
Mean Serum creatnine ( mg/ dl )	$0.48 \pm 0.195876$
Mean serum osmolality ( mmol/l)	$286.3 \pm 274.5$
Mean Duration of admission (per/ d)	$8.1 \pm 2.1$

**Table(8): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding duration of hospital admission (*per/ d*)**

Duration of hospital admission	Hyponatremic	Non hyponatremic
Mim	5	6
Max	11	12
Mean	7.4	8.8
SD	1.9	1.9
t	2.5	
p	<0.05	

**fig ( 2 ):** Comparison between hyponatremic and non hyponatremic pneumonic cases regarding duration of hospital admission (*per/ d*)

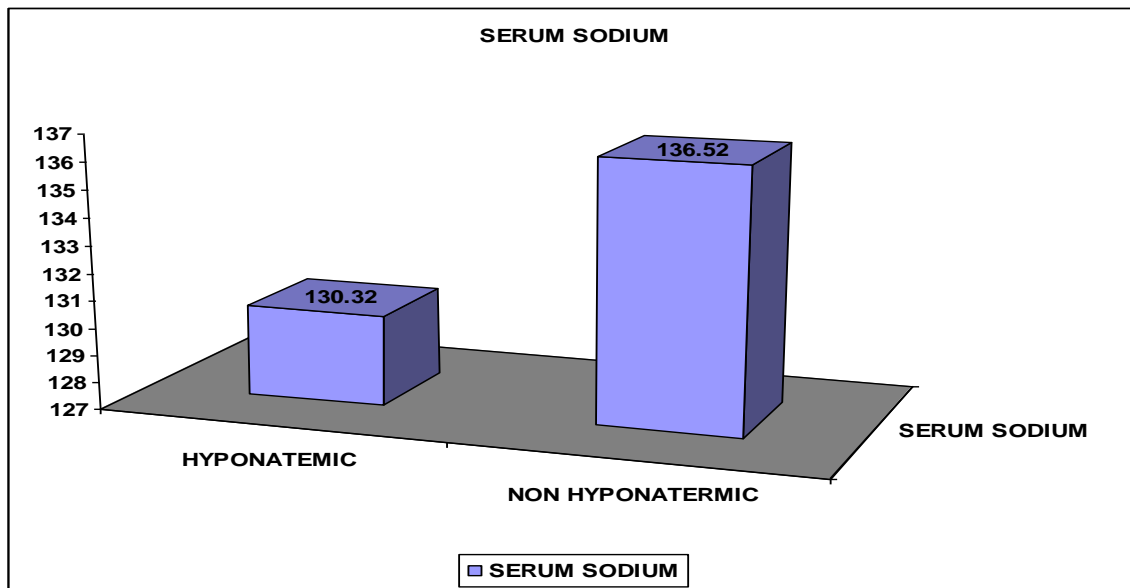


**Table( 9 ):** Comparison between population study regarding to serum sodium ( *mmol/l* )

Serum sodium	Hyponatemic	Non hyponatrmic
<b>Mim</b>	<b>128</b>	<b>135</b>
<b>Max</b>	<b>133</b>	<b>140</b>
<b>Mean</b>	<b>130.3</b>	<b>136.5</b>
<b>SD</b>	<b>1.31</b>	<b>1.58</b>
<b>t</b>	<b>15</b>	
<b>p</b>	<b>&lt;0.001</b>	

This table shows that there is a highly significant statistical difference in serum sodium between pneumonic cases .

**fig ( 3 ):** Comparison between hyponatremic and non hyponatremic pneumonic cases regarding serum sodium ( *mmol/l* )

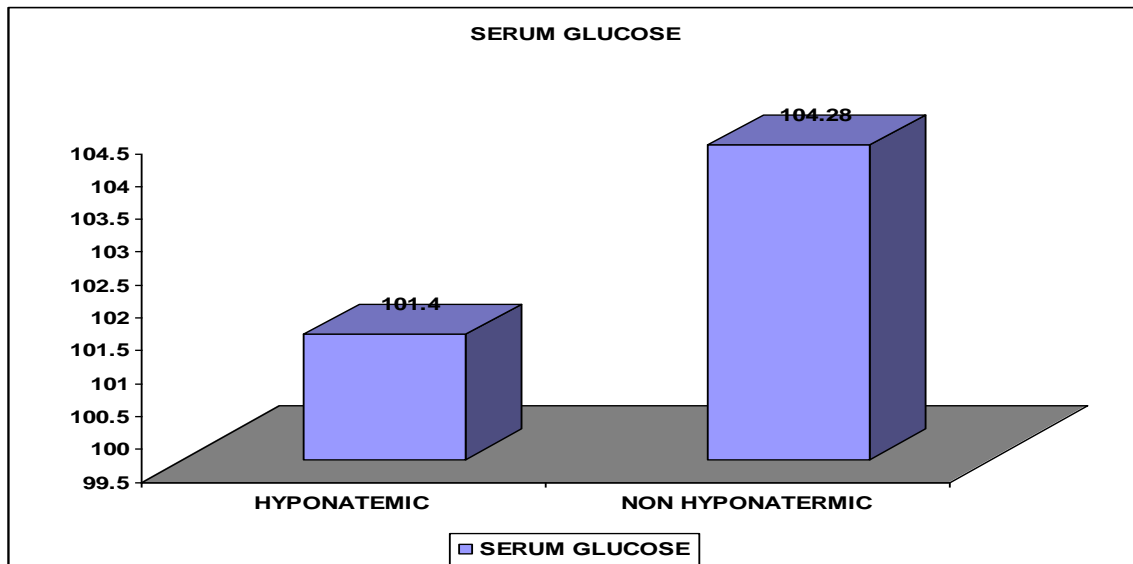


**Table( 10 ): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding serum glucose ( *mg/dl* )**

Serum glucose	Hyponatremic	Non hyponatrmic
Mim	70	60
Max	132	135
Mean	101.4	104.28
SD	25.27021	18.37915
T	1.5	
P	>0.05	

This table shows that there is non significant statistical difference in comparison between both hyponatremic and non hyponatremic pneumonic cases regarding serum glucose.

**fig (4): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding serum glucose ( *mg/dl* )**

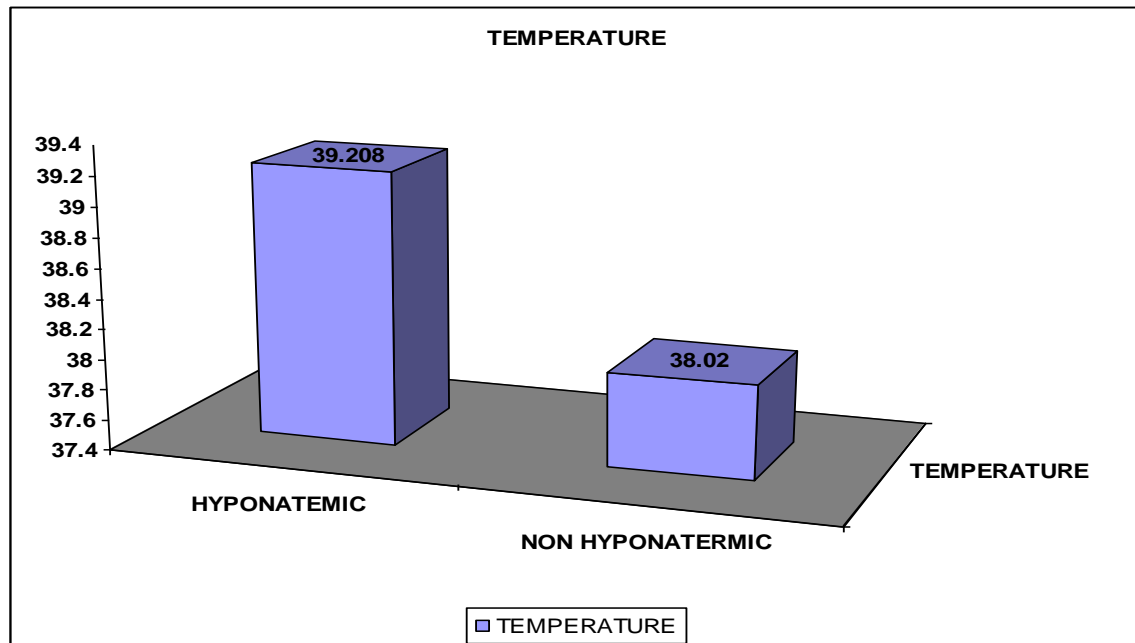


**Table(11): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding temperature (°c )**

Temperature	Hyponatemic	Non hyponatrmic
Mim	38.5	37.5
Max	40	39.3
Mean	39.208	38.02
SD	0.326497	0.334166
t	12.6	
p	<0.001**	

This table shows that there is a highly significant statistical difference in comparison between both hyponatremic and non hyponatremic pneumonic cases regarding temperature.

**fig (5): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding temperature (°c )**

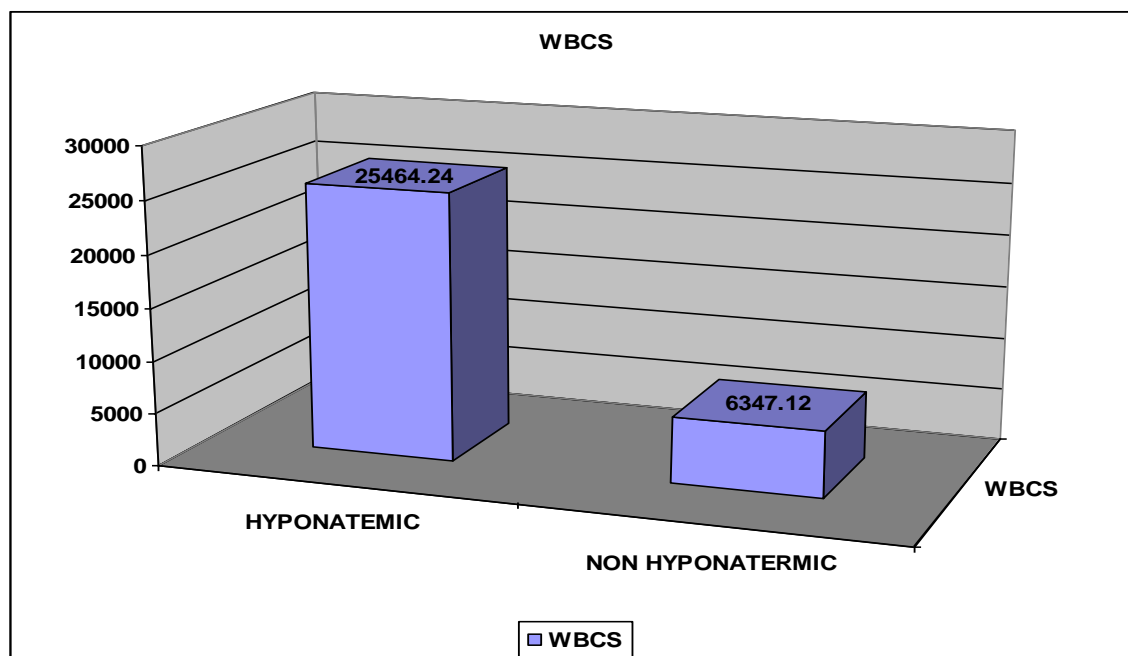


**Table(12): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding total WBC counts (*number/ $\mu$ l*)**

WBCS	Hyponatremic	Non hyponatrmic
<b>Mim</b>	<b>11360</b>	<b>3034</b>
<b>Max</b>	<b>42960</b>	<b>21770</b>
<b>Mean</b>	<b>25464.24</b>	<b>6347.12</b>
<b>SD</b>	<b>7613.035</b>	<b>4207.313</b>
<b>t</b>	<b>10.2</b>	
<b>p</b>	<b>&lt;0.001</b>	

This table shows that there is a highly significant statistical difference in comparison between both hyponatremic and non hyponatremic pneumonic cases regarding serum WBC.

**fig (6): Comparison between hyponatrmic and non hyponatremic pneumonic cases regarding total WBC counts (*number/ $\mu$ l*)**

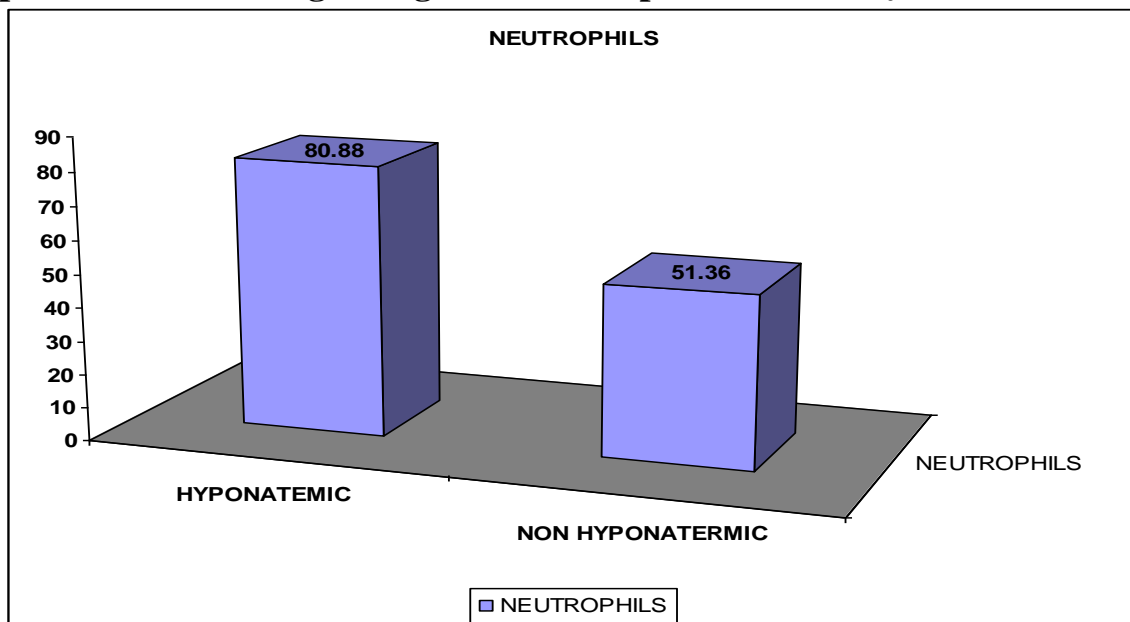


**Table(13): Comparison between hyponatrmic and non hyponatrmic pneumonic cases regarding total neutrophils counts (% of WBC )**

Neutrophils	Hyponatemic	Non hyponatrmic
Mim	32	31
Max	95	95
Mean	80.88	51.36
SD	23.17326	22.98369
t	12.3	
p	<0.001	

This table shows that there is a highly significant statistical difference in comparison between both hyponatremic and non hyponatremic pneumonic cases regarding neutrophils.

**fig (7): Comparison between hyponatrmic and non hyponatrmic pneumonic cases regarding total neutrophil counts ( % of WBC )**



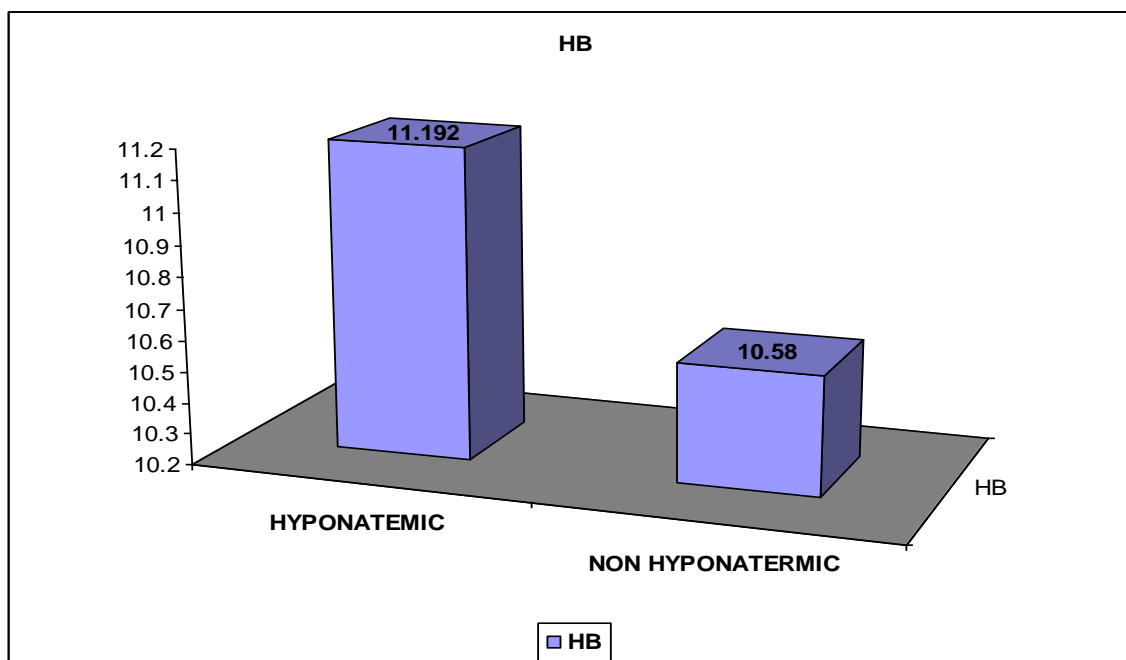


**Table(14): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding hemoglobin level ( g/dl)**

HB	Hyponatemic	Non hyponatrmic
<b>Mim</b>	8.9	8.6
<b>Max</b>	13.2	12.6
<b>Mean</b>	11.192	10.58
<b>SD</b>	1.2	1.13
<b>t</b>	0.2	
<b>p</b>	>0.05	

This table shows that there is no statistically significant difference in coparison between both hyponatremic and non hyponatremic pneumonic cases regarding hemoglobin.

**fig (8): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding mean hemoglobin level ( g/dl)**

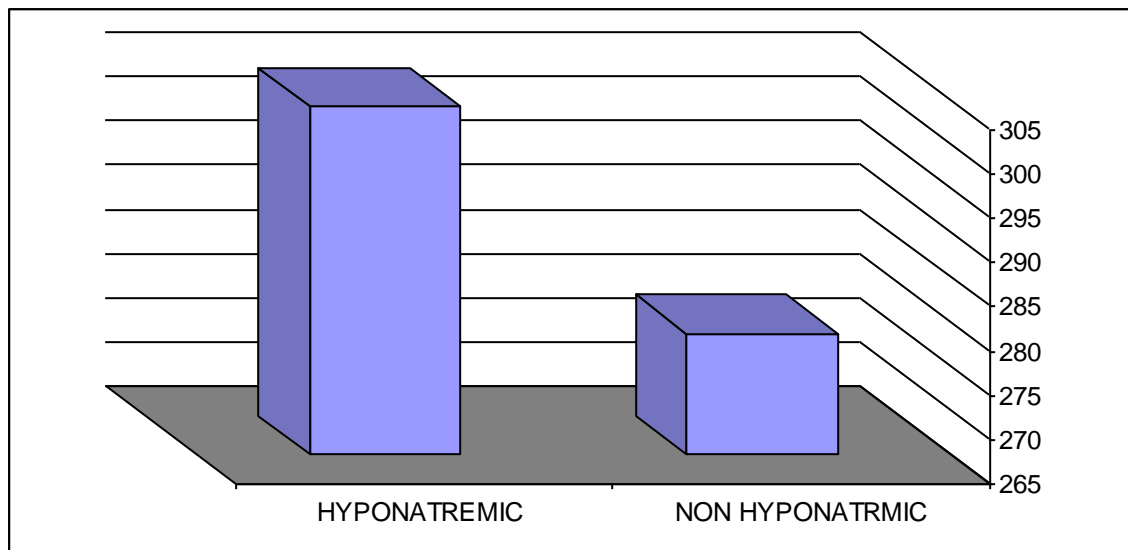


**Table(15): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding platelets count ( number / $\mu$ l )**

PLT	Hyponatremic	Non hyponatrmic
Mim	150	145
Max	500	436
Mean	304.28	278.64
SD	113.5145	93.47543
t	0.5	
p	>0.05	

This table shows that there is no statistically significant difference in coparison between both hyponatremic and non hyponatremic pneumonic cases regarding platelets count.

**fig (9): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding Platelets count ( number / $\mu$ l )**

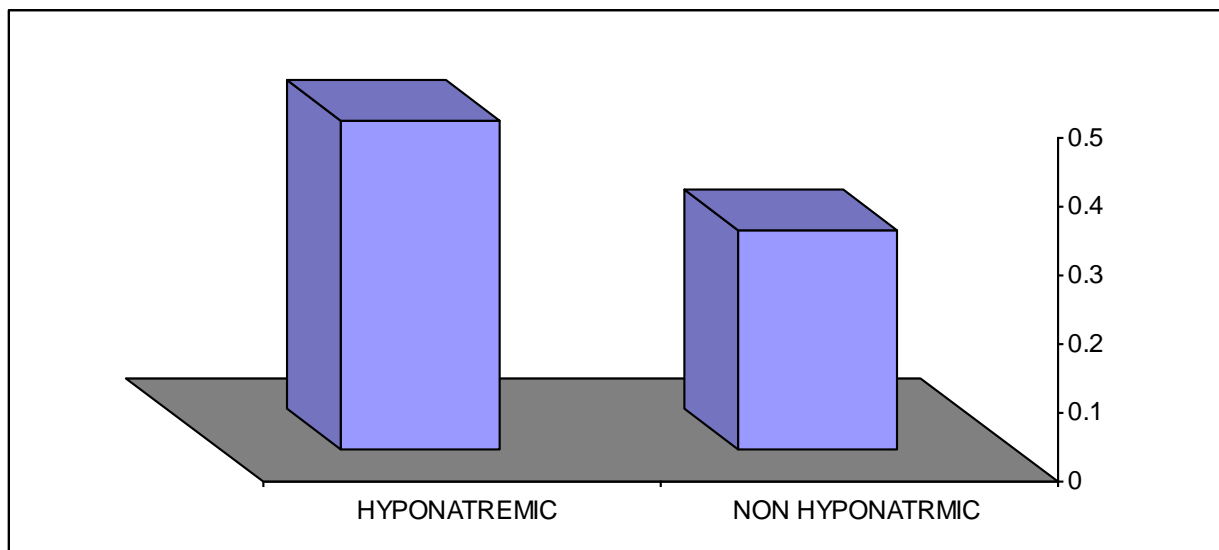


**Table(16): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding serum Creatnine levels ( mg/ dl )**

Serum creatnine	Hyponatemic	Non hyponatrmic
<b>Mim</b>	<b>0.2</b>	<b>0.2</b>
<b>Max</b>	<b>0.8</b>	<b>0.9</b>
<b>Mean</b>	<b>0.48</b>	<b>0.32</b>
<b>SD</b>	<b>0.19</b>	<b>0.18</b>
<b>T</b>	<b>0.2</b>	
<b>P</b>	<b>&gt;0.05</b>	

This table shows that there is no statistically significant difference in coparison between both hyponatremic and non hyponatremic pneumonic cases regarding serum creatinine.

**fig (10): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding serum creatnine levels ( mg/ dl )**

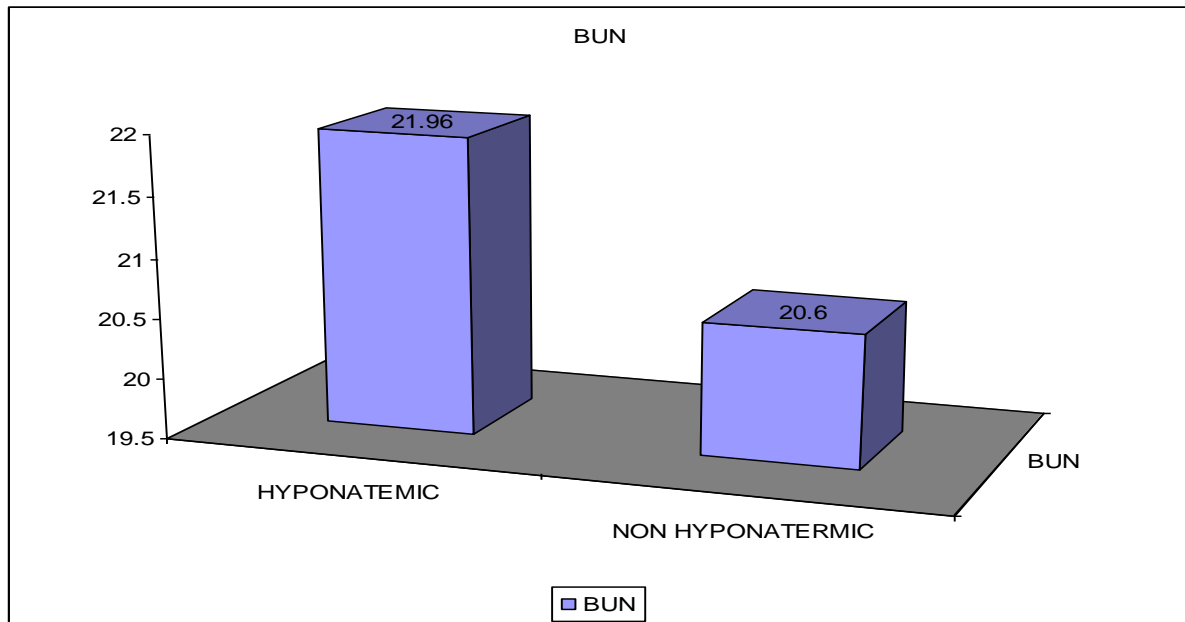


**Table(17): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding BUN( mg/ dl )**

BUN	Hyponatremic	Non hyponatrmic
<b>Mim</b>	7	9
<b>Max</b>	37	32
<b>Mean</b>	21.9	20.6
<b>SD</b>	8.03	7.03
<b>t</b>	0.5	
<b>p</b>	>0.05	

This table shows that there is no statistically significant difference in coparison between both hyponatremic and non hyponatremic pneumonic cases regarding BUN.

**fig (11): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding BUN ( mg/ dl )**

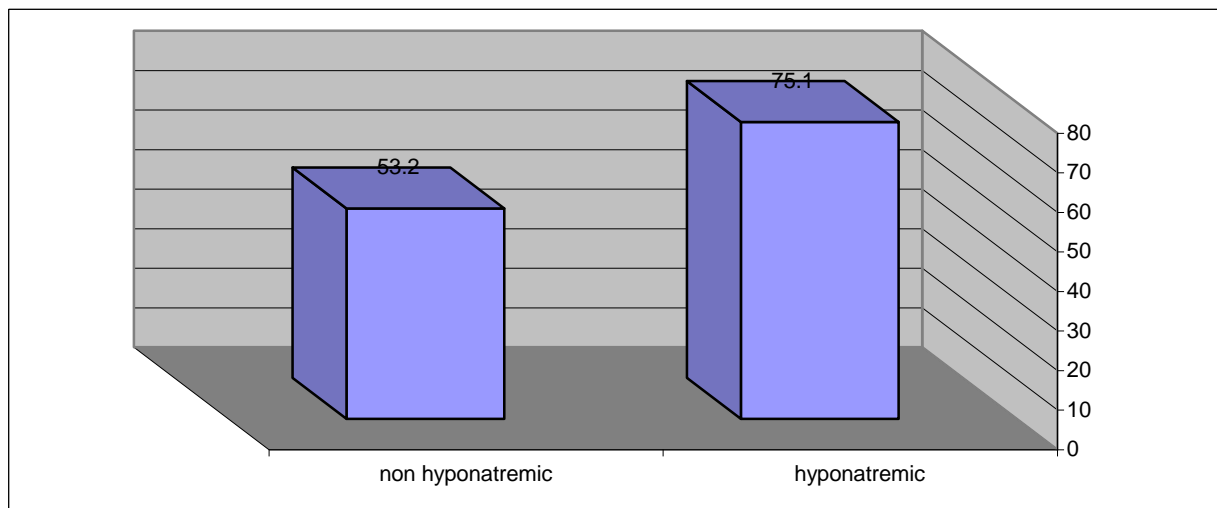


**Table(18): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding CRP serum level ( mg/ l)**

CRP	Hyponatremic	Non hyponatrmic
<b>Mim</b>	<b>12</b>	<b>7</b>
<b>Max</b>	<b>96</b>	<b>96</b>
<b>Mean</b>	<b>75.1</b>	<b>53.2</b>
<b>SD</b>	<b>23.17326</b>	<b>18.98369</b>
<b>t</b>	<b>9.5</b>	
<b>p</b>	<b>&lt;0.001</b>	

This table shows that there is a highly significant statistical difference in coparison between both hyponatremic and non hyponatremic pneumonic cases regarding CRP.

**fig (12): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding CRP serum level ( mg/ l)**

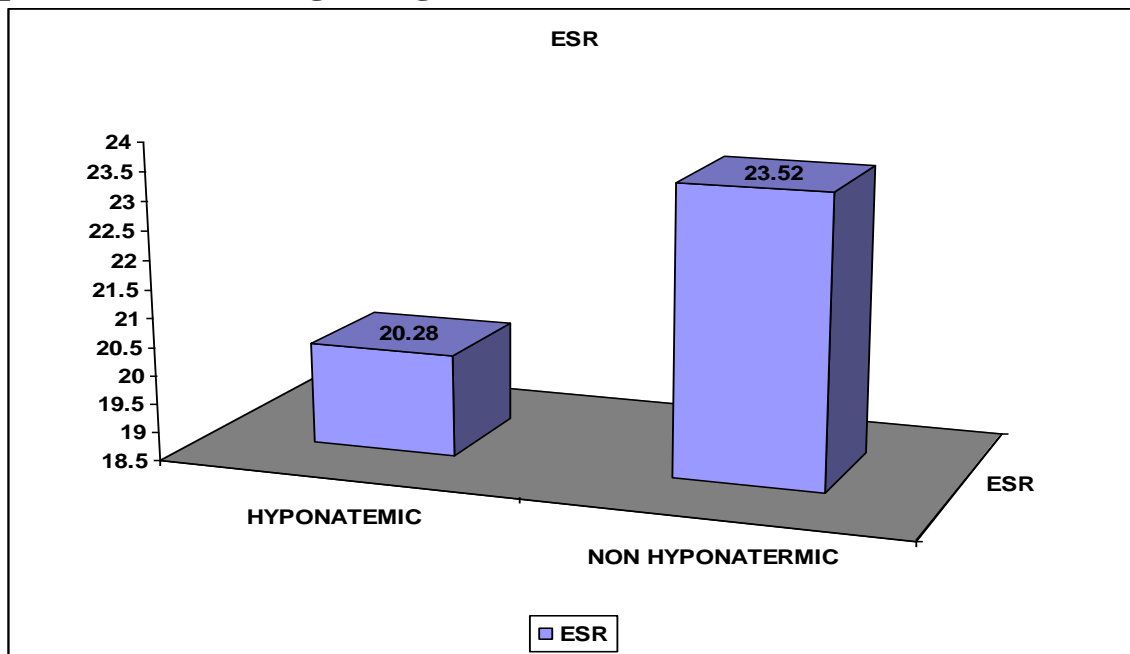


**Table(19): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding ESR level ( mm/h )**

ESR	Hyponatremic	Non hyponatrmic
Mim	7	7
Max	55	55
Mean	20.28	23.53
SD	11.11	13.3
t	0.9	
p	>0.05	

This table shows that there is no statistically significant difference in coparison between both hyponatremic and non hyponatremic pneumonic cases regarding ESR.

**fig ( 13): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding ESR level ( mm/h )**



**Table(20): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding calculated serum osmolality ( mmol/l )**

Calculated S.osmolality	Hyponatremic	Non hyponatremic
Mim	267.5	268.3
Max	296.9	286.6
Mean	286.3	274.5
SD	5.1	4.5
t	8.6	
p	<0.001	

This table shows that there is statistically significant difference in comparison between both hyponatremic and non hyponatremic pneumonic cases regarding calculated serum osmolality.

**fig ( 14): Comparison between hyponatremic and non hyponatremic pneumonic cases regarding calculated serum osmolality ( mmol/l )**

