CHAPTER THREE

3. RESULT

This study was conducted on (60) patients with hypertension as test (cases) group and (40) as control group (healthy volunteers) male account for 70% (n=42) from the cases and 67.5% (n=27) from the control group while female account 30% (n=18) from the cases and 32.5% (n=13) from control group with age mean equal . The two groups were age, gender matched.

- Table (3-1) illustrate that the mean of plasma sodium and potassium was significantly lower in the study group than the control group (135.5± 7.02) and (138.4±5.9) with (p.value 0.02) and (4.0± 0.5) versus (4.3±0.5) with (p.value 0.03) for potassium.
- Figure (3-1) shows a significant negative weak correlation between plasma sodium and duration of hypertension ( r −0.2= p 0.02).
- Figure (3-2) shows a significant positive weak correlation between plasma potassium and duration of hypertension ( r 0.2 , p 0.03)
Table (3-1) : Comparison between plasma sodium and potassium in mmol/l in hypertensive patients and non-hypertensive

<table>
<thead>
<tr>
<th>Variables</th>
<th>Control group (non-HTN) (n=40)</th>
<th>Test group (HTN) (n=60)</th>
<th>P. value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium (Na⁺) mmol/l</td>
<td>138.38 ± 5.9</td>
<td>135.47± 7.027</td>
<td>0.029</td>
</tr>
<tr>
<td>Potassium (K⁺) mmol/l</td>
<td>4.318 ±0.517</td>
<td>4.083 ±0.461</td>
<td>0.023</td>
</tr>
</tbody>
</table>

- The table shows the mean ±Std.deviation and probability (p).
- In dependant t-test was used for comparison.
- P-value ≤0.05 was considered significant
Figure (3-1) the relationship between the plasma levels of $(\text{Na}^+)$ and duration of disease ($r = 0.2$, $p < 0.02$)
**Figure (3-2)** The relationship between the plasma levels of (\(K^+\)) and duration of disease \((r = 0.2, p = 0.03)\)