Chapter Three
Results

This wascase control study, conducted inAlmokhtabar laboratoryat Bahrilocality. Eighty health pregnant women at first trimester were enrolled as case group and compared to eighty health non pregnant women as control group all weredivided between 17 – 41 years.

A demographic data about age showed the most frequency 48.8% (mean 25.5 ± 2.9) of pregnant women wasdivided between 20-30 years old (table 3.1),65% of pregnant women had multigravidesprevious pregnancies (table 3.2), the frequency of history of abortion in pregnant women was about 77.5% had not previous abortion (table 3.3).

that mean of Hb (11.6 g/dl ±1.3), RBCs (4.1×10^9 / L ±0.5), PCV (33.8%±3.3), platelets (250×10^9 / L ±64.9), and lymphocytes (28.0% ±8.0) of pregnant women decreased significantly *(p.values* 0.03, 0.004, 0.00) respectively compared to non pregnant women whom their mean of Hb (12.6 g/dl ± 1.7), RBCs (4.2×10^9/ L ±0.5), PCV(36.7 % ±4.1), platelets (315×10^9 / L ± 92.9) and lymphocytes (35.7% ± 10.9). TWBCs (6.6×10^9/L ±2.0) and neutrophils (62.9%±9.5) were increased significantly *(p.values* 0.05, 0.01) respectively compared to non pregnant women TWBCs (6.0 $\times10^9$/ L ±1.8) neutrophils (55.8% ±11.4) but MCV (82.4fl±5.2), MCH (28.3pg ±2.5), MCHC (34.3% ±1.7) and mixed count (9.3%±3.7) increased insignificantly (*p.value* = 0.40, 0.90, 0.40, 0.30) respectively(table 3.4).

According to age group in pregnant women the CBC showed no significant difference between groups(table 3.5).

The CBCaccordingtonumberof pregnancies inpregnant women wasnot statistically significant(table 3.6).

Table (3.1) Frequency of pregnant women according to age group.

Age group (years)	Frequency	Mean ± SD	Percentage %
< 20	16	18.5± 1	20.0%
20 -30	39	25.5 ± 2.9	48.8%
31 - 40	23	36.1 ± 3.1	28.8%
> 41	2	41.0 ± 1	2.4%
Total	80	121.1	100%

Table (3.2) Frequency of pregnant women according to number of pregnancies.

Number of pregnancies	Frequency	Percentage%
Primigravid	16	20%
Multigravides	52	65%
Grand Multigravides	12	15%
Total	80	100%

Table (3.3) Frequency of pregnant women according to history of abortion.

History of abortion	Frequency	Percentage%
No	62	77.5%
Yes	18	22.5%
Total	80	100%

Table (3.4) Complete blood cell count of pregnant women at first trimester compared to non pregnant women.

Study group Parameter	Cases n=80 Mean ± SD	Controls n=40 Mean ± SD	P - value
RBC × 10^9 / L	4.1 ± 0.5	4.2 ± 0.5	0.004
Hb g/dl	11.6 ± 1.3	12.6 ± 1.7	0.02
PCV %	33.8 ± 3.3	36.7 ± 4.1	0.03
MCV fl	82.4 ± 5.2	83.3 ± 6.6	0.40
MCH pg	28.3 ± 2.5	28.4 ± 2.8	0.90
MCHC %	34.3 ± 1.7	34.0 ± 1.6	0.40
Plt × 10^9 / L	250 ± 65.7	315 ± 95.5	0.00
WBC × 10^9 / L	6.7 ± 2.0	6.0 ± 1.7	0.01
Neutrophil %	62.0 ± 9.5	55.8 ± 11.4	0.00
Lymphocyte %	28.1 ± 8.0	35.5 ± 10.0	0.00
Mixed %	9.2 ± 3.7	8.5 ± 3.6	0.2

Table (3.5) Complete blood cell count of pregnant womenatfirst trimester according to age.

Study group Parameter	Î Mean ± SD	ÎÎ Mean ± SD	ÎÎÎ Mean ± SD	ÎV Mean ± SD	P - value
RBC $\times 10^9$ / L	4.0± 0.7	4.0± 0.3	4.0 ± 0.4	3.6 ± 0.1	0.93
Hb g/dl	11.2 ± 1.3	11.6 ± 1.1	11.6 ± 1.0	10.8 ± 1.4	0.08
PCV %	33.2 ± 4.3	33.6 ± 3.1	33.8 ± 2.7	32.1 ± 1.9	0.35
MCV fl	83.6 ± 4.2	83.6 ± 5.3	84.7 ± 4.7	82.1± 6.8	0.30
MCH pg	28.2 ±1.1	28.0 ±2.0	27.8 ± 1.5	25.6 ± 2.1	0.56
MCHC %	34.3 ±2.0	34.2± 2.1	34.0 ± 1.9	33.9 ± 1.9	0.09
Plt $\times 10^9$ / L	243±53.3	247±55.1	245±54.2	242±50.9	0.83
WBC $\times 10^9$ / L	6.3 ± 2.0	6.7±1.9	6.8±1.6	7.3±2.0	0.88
Neutrophil %	64.3 ± 8.0	63.5± 7.8	62.6± 7.3	60.5±7.5	0.48
Lymphocyte %	25.4 ± 4.9	24.7 ± 5.0	23.7 ± 4.5	24.1 ± 4.7	0.53
Mixed %	9.6 ±4.1	9.3 ± 3.8	9.3 ± 4.0	9.2 ± 2.9	0.67

Î (< 20),**ÎÎ**(20 - 30), **ÎÎÎ**(30 - 40), **ÎV** (> 41) years.

Table (3.6)Complete blood cell count of pregnant women at first trimester according to number of pregnancies.

Study group Parameter	Î Mean ± SD	ÎÎ Mean ± SD	ÎÎÎ Mean ± SD	P - value
RBC × 10^9/ L	4.0 ± 0.5	4.0 ± 0.4	4.0 ± 0.2	0.55
Hb g/dl	12 .6 ± 1.4	11.7 ± 1.8	11.3 ± 1.0	0.21
PCV %	34.6 ± 1.8	33.7 ± 3.5	33.1 ± 2.5	0.16
MCV fl	84.7 ± 3.5	84.3 ± 4.5	83.3 ± 4.1	0.41
MCH pg	29.9 ± 2.2	29.3 ± 2.4	28.3 ± 2.1	0.30
MCHC %	34.7 ± 2.1	34.7 ± 1.8	33.8 ± 2.2	0.27
Plt × 10^9/ L	241.5 ± 51.0	244.2 ± 53.6	242.5 ± 40.3	0.20
WBC × 10^9/ L	7.1 ± 2.0	6.9 ± 1.7	6.6 ± 1.1	0.83
Neutrophil %	67.3 ± 7.0	66.4 ± 6.7	66.2 ± 6.0	0.93
Lymphocyte %	24.1 ± 4.3	26.3 ± 5.5	26.6 ± 5.8	0.87
Mixed %	11.0 ± 3.1	9.6 ± 3.4	9.3 ± 3.1	0.90

Î (Primigravid), ÎÎ (Multigravides), ÎÎÎ (Grand Multigravides)