RESULTS

Table (1): Distribution of studied groups by sex.

Studied groups	Sex				Total	
	Males		Females			
	N	%	N	%	N	%
Acute asthma	11	36.7	19	63.3	30	100.0
Chronic asthma	8	53.3	7	46.7	15	100.0
Control	4	26.7	11	73.3	15	100.0
Total	23	38.3	37	61.7	60	100.0

$X^2 = 2.327,$ p = 0.312

This table shows that there is no significance difference between the studied group as regards sex.

Table (2): Comparison of WBCs /mm^3 between studied groups.

WBCs/mm3	Acute asthma	Asthmatics inbetween attack	Control
Range	3,800-11,200	3,750-10,800	3,950-8,750
Mean	7210	7573.33	6290.00
S.D.	2202.09	2257.91	1585.90
F	1.558		
p	0.219		

This table shows that there is no significance difference between the studied groups as regards WBCs/mm^3.

Table (3): Comparison of EOS% between studied groups.

EOS%	Acute asthma	Asthmatics inbetween attack	Control
Range	1-14	1-5	1-3
Mean	5.93	3.13	1.67
S.D.	3.00	1.41	0.82
F	19.392		
p	0.001*		
Scheffe test	*Significant		

Acute asthma is significantly different from asthmatics inbetween attack and control as regards the percentage of eosinophilic cells.

Table (4): Comparison of blood hemoglobin concentration between studied groups.

Blood hemoglobin (g/dl)	Acute asthma	Asthmatics inbetween attack	Control
Range	10.5-15.6	11.5-15.4	11.9-15.4
Mean	13.06	13.21	13.76
S.D.	1.44	1.16	1.18
F	1.456		
p	0.242		

This table shows that there is no significance difference between the studied group as regards blood haemoglobin concentration.

Table (5): Comparison of serum IL-13 between studied groups.

Serum IL-13 (pg/dl)	Acute asthma	Asthmatics inbetween attack	Control
Range	39.5-276.2	20.5-87.8	0.6-13.9
Mean	128.11	44.21	4.76
S.D.	69.01	16.66	3.57
F	34.628		
p	0.001*		
Scheffe test	*Significant		

This table shows that the level of IL-13 is statistically significantly higher in patients of group I when compared to group II&III.

Table (6): Comparison of serum IgE between studied groups

Serum IgE (IU/dl)	Acute asthma	Asthmatics inbetween attack	Control
Range	105-2000	39-406	10-98
Mean	714.31	159.69	41.67
S.D.	619.38	96.47	34.39
F	14.544		
p	0.001*		
Scheffe test	*Significant		

This table shows that the level of IgE is statistically significantly higher in patients of group I when compared to group II&III.

Table (7): Comparison of WBCs/mm^3 among cases with acute asthma in relation to severity of disease.

WBCs/mm3	Mild to moderate	Severe
Range	4550-11200	3800-10500
Mean	7492.31	6994.12
S.D.	2313.08	2159.20
t	0.607	
P	0.549	

This table shows that there is no significance difference between the studied groups regarding WBCs/mm^3 in relation to severity of disease among cases with acute asthma.

Table (8): Comparison of EOS% among cases with acute asthma in relation to severity of disease.

EOS%	Mild to moderate	Severe
Range	1-7	3-14
Mean	3.77	7.59
S.D.	1.69	2.74
t	4.414	
P	0.001*	

*Significant

This table shows a highly statistically significant difference regarding eosinophilic cell percentage in cases of severe asthmatics when compared to these of mild to moderate asthmatics.

Table (9): Comparison of blood hemoglobin concentration among cases with acute asthma in relation to severity of disease.

Blood hemoglobin (g/dl)	Mild to moderate	Severe
Range	10.5-15.6	11.7-15.2
Mean	12.56	13.44
S.D.	1.75	1.05
t	1.603	
P	0.126	

This table shows that there is no significance difference between the mild to moderate in relation to severe cases as regards blood haemoglobin concentration.

Table (10): Comparison of serum IgE among cases with acute asthma in relation to severity of disease.

erum IgE (IU/dl)	Mild to moderate	Severe
Range	105-520	404-2000
Mean	284.42	1043.05
S.D.	154.53	642.22
t	4.696	
P	0.001*	

*Significant

This table shows a highly statistically significant difference in severe asthmatics when compared to mild to moderate asthmatics as regards the level of serum IgE.

Table (11): Comparison of serum IL-13 among cases with acute asthma in relation to severity of disease.

Serum IL-13 (pg/dl)	Mild to moderate	Severe
Range	39.5-98.7	120.4-276.2
Mean	62.69	178.14
S.D.	19.17	47.12
t	9.160	
P	0.001*	

*Significant

This table shows a highly statistically significant difference in severe asthmatics when compared to mild to moderate asthmatics as regards the level of serum IL-13.

Table (12): Correlation between severity of asthma and studied variables.

Variables	Severity of asthma	
	R	p
Total Leukocytic Count(TLC)	-0.117	0.537
Hemoglobin	0.318	0.087
EOS%	0.709	0.001*
IL-13	0.856	0.001*
IgE	0.769	0.001*

*Significant

This table shows that there is significance positive correlation between degree of severity of asthma and eosinophilic percentage,

serum IL-13 level, serum IgE level and a non significant correlation between severity of the disease and hemoglobin concentration while the total leukocytic count (TLC) show a non significant negative correlation.

Table (13): Correlation between IL-13 and studied variables.

Variables	IL-13	
	R	p
Total Leukocytic Count(TLC)	0.075	0.571
Hemoglobin	-0.082	0.535
EOS%	0.735	0.001*
IgE	0.943	0.001*

*Significant

This table shows a statistically significant positive correlation between level of IL-13 and percentage of eosinophilic count and also with level of IgE.

It also shows a statistically non significant negative correlation with the blood haemoglobin concentration, and a statistically non significant correlation with total leukocytic count(TLC).