

RESULTS

1- Our study include 50 asthmatic children of different ages, age range between (2-14) years and different sex (30) males and (20) females and 10 control children.

They were classified to 6 age groups with 2 years interval.

2- the studied group was classified to atopic and non atopic children according to the results of skin test and the

family history.

The atopics were (35) children (70%) of cases, they have positive skin test for more than two of the common allergens.

The non atopics were (15) cases (30 %) they had negative skin test for common allergens and low serum IgE level.

3- The results of skin testing were shown in table(7) the most prevelant antigens were :- hous dust, house dust mites, mixed mouldes, feater, Cladosporium and others.

4-We had one case (No 13) suffering from T.B (2 %) as diagnos from

X ray chest

Clinical examination

Tuberculin test

Culture of the sputum.

case No 13

5- We had one case suffering from Ichthyosis (case No 8).

6- We had one case cortisone dependent (case No 7).

7- one case has one attack of rheumatic fever

8- X ray results were :-

(a) One case showed focal lung lesion diagnosed as

T.B.

(b) 14 cases showed hyperinflation, they were

chronic asthmatics, age between 9 - 12 years

(c) 18 cases showed prominent bronchovascular markings of both lungs, exaggerated lung shadows with no focal lesions.

(d) 17 cases revealed normal and clear lung shadows with no focal lesion.

9- Seasonal variations in symptoms of asthma are shown in table (6)

10- total leucocytic count and absolute eosinophilic count in the whole group are shown in table (9) and (10).

11- Serum immunoglobulins IgE and IgG are shown in tables (9) , (10)

12- Statistics were done for mean, standard deviation, interval and range were estimated for the children in the study table (8).

13- Comparison between atopics and non atopics is shown in table (11).

14- Comparison between male and female patients is shown in table (12).

15- Comparison between different age groups is shown in table (13).

16- The results of stool culture are shown in table (15).

17- IgG was detected in the stool of (5) cases. Its

concentration was very low.

The control group were 10 cases.

Their results were as follows :-

Serum IgG :

mean = 1057.5 mg/100 ml

rang = 750 - 1320 mg/100 ml

Serum IgE :

mean = 35.055 i.u/l.

rang = 9 - i.u/l.

IgG in the stool :

Not detected.

Stool culture : Mainly : E. coli and bacteroids.

Table(5):Show Incidence of possible precepitating factors

possible precepitating Factor	No of cases precepitated		No of cases not precepitated		Total
	No	%	No	%	
Respiratory tract infection	38	76	12	24	50
Emotions	24	48	26	52	50
Excercise	18	36	32	64	50
Foods	30	60	20	40	50
Odours	19	38	31	62	50

Most patients had more than one factor precepitating the asthmatic attacks.

Table (6) Shows seasonal variations in symptoms.

Season	No. of cases	%
Winter	35	70
Summer	15	30
No seasonal variations	5	10
Inbetween seasons	2	4

Table (7) shows results of skin test

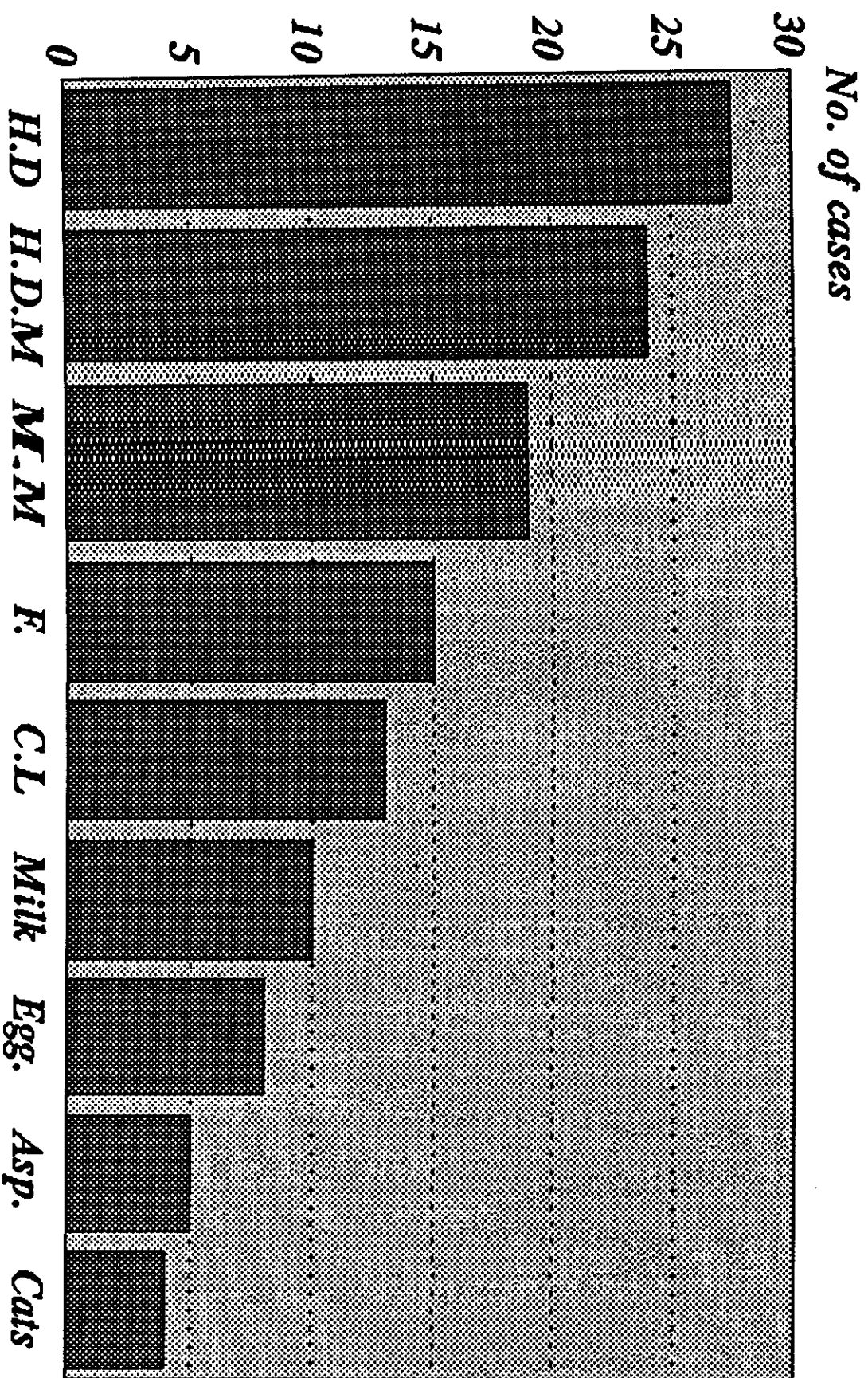


Table (8) Showing Descriptive statistics of the Studied Cases.

Variable	X	SD	minimum	maximum
Age	6.3	3.5	2	14
Relative eosinophilic T.L.C.	6.28	5.53	0	3000
Absolute eosinophilic count	566	547	0	2400
Serum IgE	283.2	258	39	1186
Serum IgG	1343.75	378.25	661	2320

Table (9)

Show level of total leucocytic count, relative and absolute eosinophilic count and serum immunoglobulins levels in Atopic children (35 cases).

S.N	T.L.C cells/ml blood	Relative eosinophils cells/ml blood	Absolute eosinophils cells/ml blood	Serum Ig E	Serum Ig G
1	4300	12	516	1186	2078
2	12800	13	1560	262	1088
3	4500	10	450	191	2078
4	7100	5	355	180	1186
5	8500	3	255	135	1066
6	7400	2	148	287	1693
7	10100	8	808	749	972
8	7500	1	75	204	1427
9	9000	10	900	804	1407
10	8000	30	2400	997	1746
11	11000	0	-	125	814
12	3600	6	216	640	994
13	11800	4	472	336	903
14	12800	8	1024	376	1842
15	10500	3	315	239	994
16	12400	2	248	845	1497
17	6550	4	260	127	1390
18	6000	4	240	237	1540
19	12800	8	960	310	1693

S.N	T.L.C cells/ml blood	Relative eosinophilis cells/ml blood	Absolute eosinophilis cells/ml blood	Serum Ig E	Serum Ig G
20	6400	8	512	120	1900
21	12200	3	366	153	1250
22	11600	11	1276	190	1700
23	10600	3	318	680	1470
24	13000	1	130	120	1900
25	15400	12	648	120	1250
26	10800	16	1728	304	1130
27	10300	17	1751	240	1180
28	8000	11	880	520	963
29	13110	5	655	280	1430
30	10000	17	1700	180	1900
31	3500	2	70	130	1300
32	8000	4	320	395	1850
33	8400	5	420	398	1250
34	9450	4	376	150	1250
35	8000	5	400	200	2320

Table (10) T.L.C. absolute and relative eosinophills and serum IgE & IgG in non atopic asthmatic children (15 cases).

S.N	T.L.C	Relative eosinophills	Absolute eosinophills	Serum Ig E	Serum Ig G
1	19200	9	1728	195	1366
2	13000	1	130	237	1163
3	11000	3	330	41	903
4	11200	4	468	57	1066
5	3900	2	78	150	1185
6	3000	2	60	45	994
7	4850	4	192	52	903
8	12800	3	366	183	1287
9	6700	3	201	153	1250
10	10200	5	510	175	1410
11	14000	2	280	130	700
12	5400	6	324	75	1250
13	7200	1	72	120	1250
14	7500	10	750	90	1500
15	4000	2	80	39	661

Table (11)**Comparing statistics of :-**

- T.L.C.
 - Relative eosinophilic count
 - Absolut eosinophilic count
 - Serum IgE
 - Serum IgG
 - And degree of asthma
- In Atopics & non atopics**

Variable	Atopic children		non atopic children		T. test
	X	S.D	X	S.D	
Relative eosinophilic count	7	6	3	2	3.07 **
T.L.C.	9173	2735	8584	4643	.47 *
A.E.C.	667	578	352	415	2.19 **
Serum IgE	361	278	117	62	4.87 **
Serum IgG	1441.2	393.1	1136.5	245	3.34 **
Degree of asthma	2.53	0.51	2.19	0.66	1.84 **

N.B**** Significant difference at $P < .01$** *** In Significant difference at $P > .01$**

Table (12) Comparing male and female asthmatics as regards serum IgE & IgG levels .

Variable	male patients (30)		female patients (20)		T. test
	X	S.D	X	S.D	
Serum IgE	316.8	281.2	232.7	215.6	1.19
Serum IgG	1318.6	400.3	1381.1	349.2	0.58

No Significant difference between male and female asthmatics as regards serum IgE & IgG

Table (13) Showing statistics of serum IgE & IgG in different age groups in asthmatic children

Group No.	Age From To	No. of cases	serum IgE		serum IgG	
			X	S.D	X	S.D
I	2 4 y	16	226.8	197.2	1370.3	397.3
II	4 6 y	9	266.8	211.7	1357.4	334.1
III	6 8 y	11	362.09	352.4	1265.9	415.5
IV	8 10 y	4	215.7	29.12	1196.7	177.5
V	10 12 y	4	180	95.6	1410.7	447.5
VI	12 14 y	6	428.33	428.33	1448.6	350
Total	2 14 y	50 cases	283.2	258.01	1343.7	378.2

F test is insignificant

- No significant difference between serum IgE & IgG in different age groups of the studied group.

Table (14) Comparing cases with positive family history with cases of negative family history

variable	Cases with +ve family 26 cases		Cases with -ve family 24 cases		T test
	X	S.D	X	S.D	
Serum IgE	392.73	311.45	195.67	93.3	3.53 **
Serum IgG	1416.85	376.8	1264.6	371.3	1.44 *
Degree of asthma	2.85	0.5	2.25	.60	2.05 **

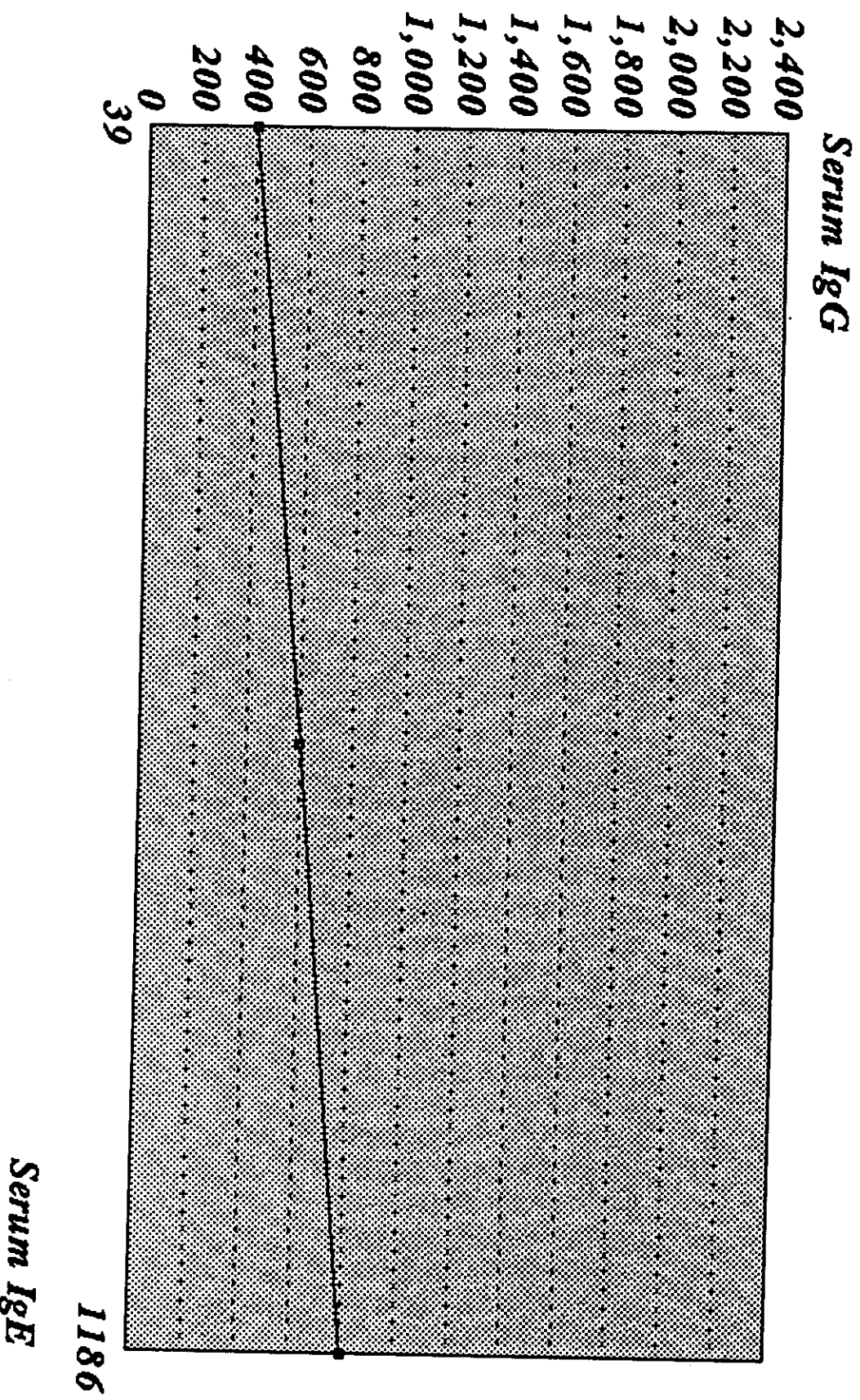
**** Significant different at $P < .01$**

*** In Significant different at $P > .01$**

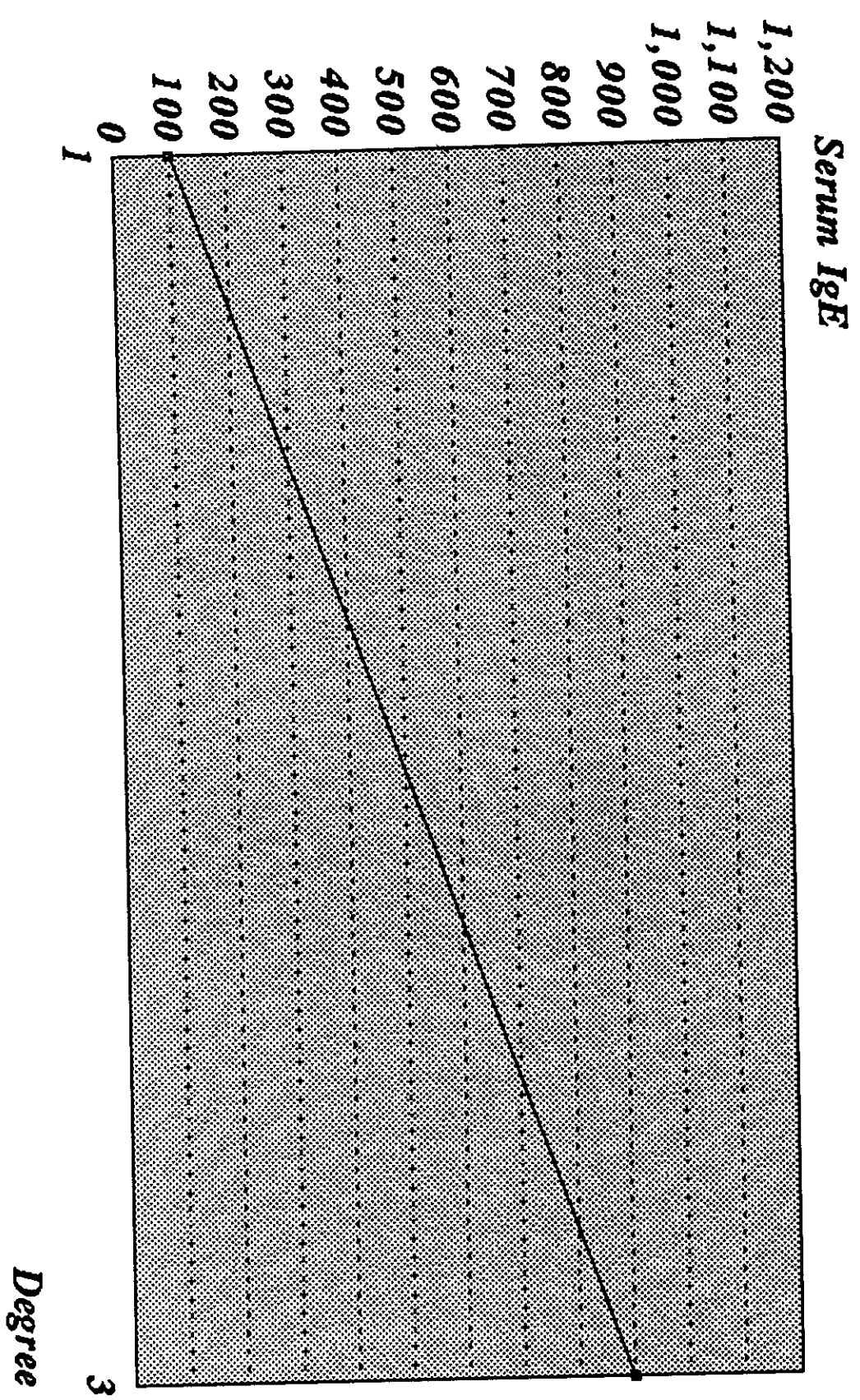
Table (15) Show the predominant bacterial flora isolated from the stool severe (25 cases).

Type of organism	Number of cases	total cases	paccaing percentage
1-E.coli	11	25	44 %
2-Bacteroids	5	25	20 %
3-Claitridia	5	25	20 %
4-Proteus	2	25	8 %
5-Klebsiella	2	25	8 %
Total	25	25	100 %

Relation between serum IgE and serum IgG



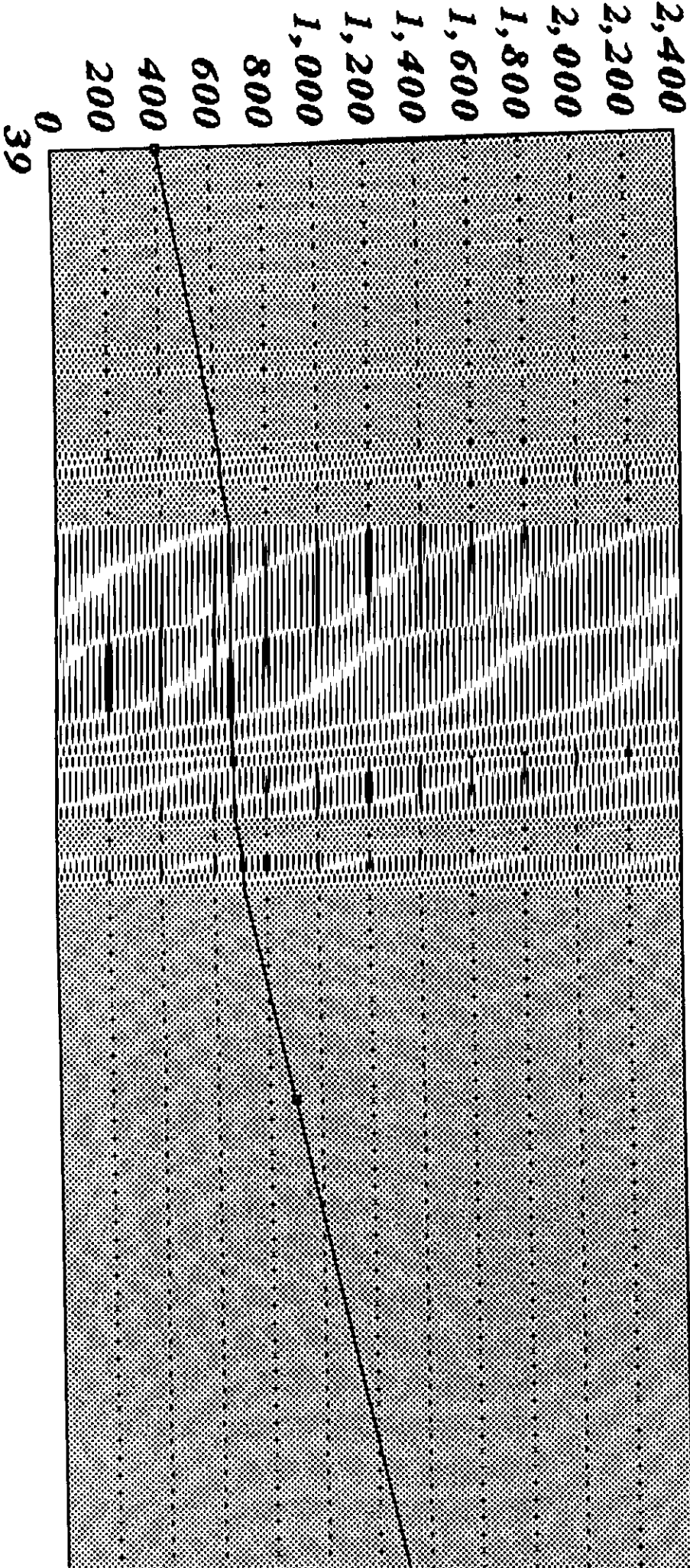
The relation () serum IgE and Degree of Bronchial asthma



$r = .46$ positive relation

The relation between Se and IgE and absolute eosinophi

Absolute eos. count



$r = +0.3$ $p < 0.05$ Significant relation

Serum