RESULTS

Results

Thirty two patients (6 males and 26 females) age range from 22-52 years of which 22 patients were suffered from G.I.T. complaint and 10 with no complaint, 15 patients had relief of symptoms after food deprivation

The results of the different investigations performed revealed the following:

1- Before food challenge :

a. Total serum IgE

Serum IgE level were higher than the normal range in 5 of 32 rheumatoid arthritis patients with history of exaggeration symptoms related to certain types of food. The arithmetical mean was 208 + 0.25 I.U/ml with a range of 179-285 I.U/ml the individual values were 179 I.U/ml, 187 I.U/ml, 193 I.U/ml, 197 I.U/ml and 285 I.U/ml.

b. Specific IgE to food antigen

Specific IgE antibodies to the used food antigens were of extremely low levels in all patients before food challenge it was less than 0.18 AEU/ml.

2- After food challenge.

a. Total serum IgE

Serum IgE level was above the normal range (above 163 I.U/ml.) in 11 out of 32 patients. Arithmetical mean was 338 + 113 I.U/ml. with a range of 263 to 421 I.U/ml. 5 patients of 11 having high serum total IgE had undetectable specific IgE.

Two patients with high serum IgE had high specific IgE for fish

antigen.

Four patients had high specific IgE for egg antigen, out of 32 patients 22 patients were had a complaint of G.I.T. Troubles and their total serum IgE was of arithmetical mean 212 + 130 I.U/ml.

Ten patients out of 32 had no history of G.I.T complaints and their total serum IgE was of arithmetical mean 118 + 72 I.U/ml.

b. Specific IgE to food antigens

Specific serum IgE antibodies were above the normal range in 6 of 32 patients after food challenge, arithmetical mean was 4.83 + 2.58 AEU/ml with a range of 2.3 to 8.5 AEU/ml. Two patients had high specific IgE for fish antigen the individual values were 2.3, 3.6 AEU/ml.

In the mean time four patients had high specific IgE for egg antigen the individual values were 2.9, 4.1, 7.6 and 8.5 AEu/ml.

The studied cases were subdivided into 3 groups.

Group I : Include patients with noraml total serum IgE and undetectable specific IgE. This group include 21 patients.

Group II : Include 6 patients with high total IgE and high specific IgE.

Group III: Include 5 patients with high total serum IgE and undetectable specific IgE.

Leucocyte migration inhibition factor (L I F)

Distribution of the studied groups of cases according to migration inhibition test of leucocytes percent are illustrated in table 21. The data shows that the highest was above 75% was noticed in 9 patients, in group I, all patients of group II and all patients of group III.

The lowest value was observed in 2 patients in group I only where the value ranged from 30-50%.

Comparison of the mean values of migration inhibition test % among the studied cases in the three groups revealed that

The mean value in group I was 0.787 + 0.23.

The mean value in group II was 0.963 + 0.063

The mean value in group III was 0.913 + 0.074

Diagramatic illustration for the different percentage of the studied cases for total and specific IgE .

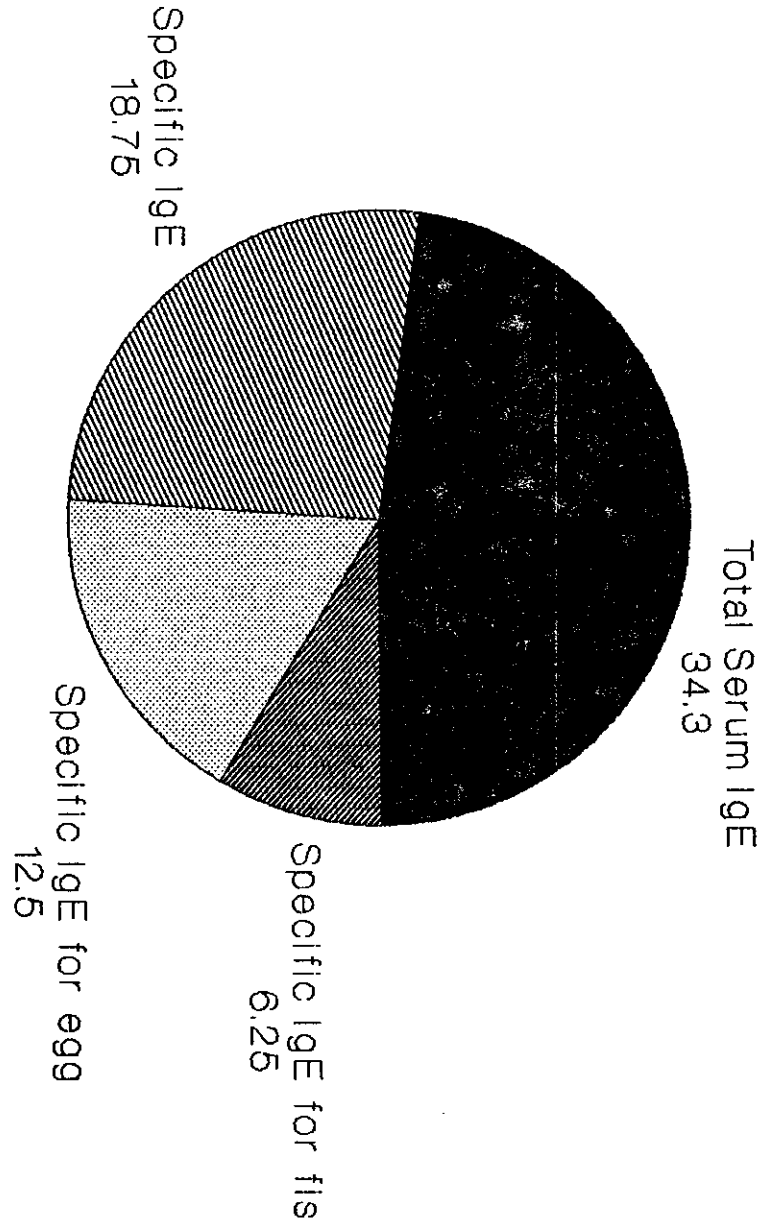

Table (1)

Number and percentage of positive and negative cases for total serum IgE in different clinical Forms.

		Group I	Group II	Group III	Group IV	Group V	Group VI
No.		15	17	22	10	18	14
Positive cases	No.	9	2	10	1	7	4
	%	60%	11.8%	45.5%	10%	38.8%	28.5%
Negative cases	No.	6	15	12	9	11	10
	%	40%	8.2%	45.5%	90%	61.2%	71.5%

Group I = Patients with relief of symptoms

Group II = Patients with no relief of symptoms

Group III= Patients with G.I.T. complaint

Group IV = Patients without G.I.T. complaint

Group V = Patients with duration of antirheumatic more than 2 years

Group VI = Patients with duration of antirheumatic less than 2 years

Table (2)

Number and percentage of positive and negative cases for specific IgE for egg in different clinical conditions

		Group I	Group II	Group III	Group IV	Group V	Group VI
No.		15	17	22	10	18	14
Positive cases	No.	4	0	4	0	3	1
	%	26.7%	0%	18.2%	0%	16.7%	7.1%
Negative cases	No.	11	17	18	10	15	13
	%	73.3%	100%	81.8%	100%	83.3%	92.9%

Group I = Patients with relief of symptoms

Group II = Patients without relief of symptoms

Group III= Patients with G.I.T. complaint

Group IV = Patients without G.I.T. complaint

Group V = Patients with duration of antirheumatic more than 2 years

Group VI = Patients with duration of antirheumatic less than 2 years

Table (3)

Number and percentage of positive and negative cases for specific IgE for fish in different clinical conditions

		Group I	Group II	Group III	Group IV	Group V	Group VI
No.		15	17	22	10	18	14
Positive cases	No.	2	0	2	0	2	0
	%	13.3%	0%	9.1%	0%	11.1%	0%
Negative cases	No.	13	17	20	18	16	14
	%	86.7%	100%	90.9%	100%	88.9%	100%

Group I = Patients with relief of symptoms

Group II = Patients without relief of symptoms

Group III= Patients with G.I.T. complaint

Group IV = Patients without G.I.T complaint

Group V = Patients with duration of antirheumatic more than 2 years

Group VI = Patients with duration of antirheumatic less than 2 years

Table (4)

Comparison of serum total IgE in patients before and after food challenge.

	Before food challenge.	After food challenge.
No. of patients 32		
Mean	120.3	183.1
S. D.	53.8	122.57

Table (5)

Comparison of serum total IgE between patients with G.I.T. complaint and those without G.I.T. complaint before food challenge.

	Patients with G.I.T complaint	Patients without G.I.T complaint
No.	22	10
Mean	129.59	99.9
S.D	55.29	46.54

t 1.575

p > 0.05 non significant

Table (6)

Cmparison of serum total IgE between patients with G.I.T. complaint and those without G.I.T. complaint after food challenge.

	Patients with G.I.T.complaint	Patients without G.I.T.complaint
No.	22	10
Mean	212	118
S.D.	130.35	72.42

t 2.63

p <0.05 significant

Table (7)

Comparison of serum total IgE in patients with G.I.T. complaint before and after food challenge.

	Before food challenge	After food challenge
No. of patients	22	22
Mean	129.59	212.73
S.D.	55.29	130.35

t 2.41

p <0.05 significant

Table (8)

Comparison of serum total IgE in patients without G.I.T. complaint before and after food challenge.

	Before food challenge	After food challenge
No.	10	10
Mean	99.9	118
S.D.	46.54	72.42

t 1.8

p >0.05 non significant

Table (9)

Comparison of serum total IgE in patients with relief of symptoms and those with no relief before food challenge.

	Patients with relief of symptoms	Patients with no relief
No.	15	17
Mean	156.8	88.2
S.D.	47	36.4

t 4.58

p <0.001 highly significant

Table (10)

Comparison of serum total IgE in patients with relief of symptoms and those with no relief after food challenge.

	Patients with relief of symptoms	Patients with no relief
No.	15	17
Mean	264.5	111.29
S.D	118.3	71.86

t 4.357

p <0.001 highly significant

Table (11)

Comparison of serum total IgE in patients with relief of symptoms before and after food challenge.

	Before food challenge	After food challenge
No.	15	15
Mean	156.8	264.5
S.D	47	118.3

t 4.36

p <0.001 highly segnificant

Table (12)

Comparison of total serum IgE in positive cases (with high specific IgE) and negative cases befor food challenge

	Positive cases	Negative cases
No.	6	26
Mean	180.7	106.4
S.D	60.7	42.1

t 2.8

p <0.05 significant

Table (13)

Comparison of total serum IgE in positive cases (with high specific IgE) and negative cases after food challenge

	Positive cases	Negative cases
No.	6	26
Mean	341.7	146.5
S.D.	46.4	103.8

t 7.01

p <0.001 high significant

Table (14)

Comparison of serum total IgE in positive cases before and after food challenge

	Before food challenge	After food challenge
No.	6	6
Mean	180.7	341.7
S.D.	60.7	46.4

t 4.49

p <0.05 significant

Table (15)

Comparison of serum total IgE in positive cases (with high specific IgE for egg and fish)

	Egg sensitive patients	Fish sensitive patients
No.	4	2
Mean	353.3	318.5
S.D.	55.2	6.4

Table (16)

Comparison of specific IgE (to egg and fish) in positive and negative cases after food challenge.

	Positive cases	Negative cases
No.	6	26
Mean	4.83	2.3
S.D.	2.6	0.95

t 2.36

p <0.05 significant

Table (17)

The mean level of specific IgE in egg and fish sensitive patients.

	Egg sensitive	Fish sensitive
No.	4	2
Mean	5.95	2.6
S.D.	2.46	0.42

Table (18)

The mean levels of specific IgE in egg sensitive patients before and after food challenge.

	before food challenge	after food challenge
No.	4	4
Mean	2.1	5.95
S.D.	0.82	2.46

t 2.96

p <0.05 significant

Table (19)

Comparison between specific IgE in patients with relief of symptoms and those without relief after food challenge

	Patients with relief of symptoms	Patients without relief
No.	15	17
Mean	4.83	0.97
S.D.	2.58	0.41

t 2.3

p <0.05 significant

Table (20)

Comparison between the mean value of migration index among the three different groups.

Group	No. of cases	Mean	S.D.	t	p
Group I	10	0.787	0.23	2.2	<0.05
Group II	3	0.963	0.063	1.47	>0.05
Group III	3	0.913	0.074	0.86	>0.05

Group I = Patients with normal total and specific IgE

Group II = Patients with high total and normal specific IgE

Group III = Patients with high total and specific IgE

Distribution of the studied groups according to migration index