

RESULTS

The results are summarised in tables (1-13) and Figures (1-6).

Table (1), Figure (1) showed that

- Total leukocytic count : was significantly higher in bacterial, partially treated group than viral and control groups. ($P < 0.05$)
- Absolute neutrophile count : was significantly higher in bacterial, partially treated group, than viral, T.B. and control groups ($P < 0.001$).
- Absolute lymphocytic count : was significantly higher in T.B. group than control group ($P < 0.05$).
- Absolute monocytic count : was insignificantly different from control group and other groups ($P > 0.05$).
- Absolute eosinophile count : was significantly higher in bacterial and partially treated groups than viral and control groups. In bacterial and partially treated group it was insignificantly different than T.B. groups ($P < 0.05$).
- Serum CRP : was significantly higher in bacterial group than viral, partially treated, T.B. and control groups. In partially treated group, it was significantly higher than that of viral, T.B and control groups ($P < 0.001$).

Table (1) : Comparative study among the different groups regarding leucocytic count and serum CRP.

Studied groups variables	Bacterial N = 14 $\bar{X} \pm SE$ Range	Viral N = 11 $\bar{X} \pm SE$ Range	Partially treated bacterial N = 9 $\bar{X} \pm SE$ Range	T.B N = 7 $\bar{X} \pm SE$ Range	Febrile convulsion (control) N = 9 $\bar{X} \pm SE$ Range	F	P
T.L.C. /mm	13785.71 $\pm$ 2313.3 a (5700 - 36000)	8031.82 $\pm$ 459.0 b (6000 - 10400)	12038.89 $\pm$ 1292.3 a (6800 - 18250)	10357.14 $\pm$ 1012.8 ab (4800 - 12200)	8044.44 $\pm$ 407 b (6400 - 10000)	8.441	0.05
A.N.C. /mm	9021.14 $\pm$ 1690.1 a (3534 - 24840)	4388.45 $\pm$ 201.5 b (3328 - 4992)	7964.89 $\pm$ 784.3 a (4216 - 11315)	5319.29 $\pm$ 546 b (2400 - 6600)	4521.11 $\pm$ 275 b (3584 - 5856)	11.324	0.001
A.L.C. /mm	3643.93 $\pm$ 583.8 ab (1710 - 9360)	3216.0 $\pm$ 303.9 ab (1980 - 5096)	3432.61 $\pm$ 464 ab (2176 - 6023)	4466.0 $\pm$ 534.7 a (1968 - 6000)	3017.6 $\pm$ 349.5 b (2025 - 4500)	5.772	< 0.05
A.M.C. /mm	355.07 $\pm$ 37.8 ac (214 - 720)	279.68 $\pm$ 23.95 abc (208 - 460)	271.0 $\pm$ 17.5 bc (204 - 367)	352.86 $\pm$ 53.18 abc (220 - 610)	331.22 $\pm$ 15 c (261 - 400)	7.961	> 0.05
A.E.C. /mm	348.29 $\pm$ 74.5 a (113 - 1080)	146.55 $\pm$ 12.41 bc (104 - 276)	249.83 $\pm$ 43.7 a (124 - 548)	219.0 $\pm$ 49.47 a (115 - 366)	129.0 $\pm$ 22.1 c (72 - 243)	0.964	< 0.05
A.B.C. /mm	8.07 $\pm$ 8.1 113	0	0	0	0		
Serum CRP mg/L	61.29 ($\pm$ 4.5) a (36-90)	6.55 ($\pm$ 1.9) c (0 - 18)	20.67 ($\pm$ 5.0) b (0 - 36)	8.37 ($\pm$ 3.1) c (0 - 24)	4.0 ($\pm$ 0.1) c (0 - 6)	14.557	< 0.001

Values are means $\pm$ standard error, range in parentheses.

Group means sharing same letter are not significantly different from each other

P value < 0.05 is significant.

T.L.C. = total leucocytic count

A.N.C. = Absolute neutrophile count

A.L.C. = Absolute lymphocytic count

A.M.C. = Absolute monocytic count

A.E.C. = Absolute eosinophile count

A.B.C. = Absolute basophile count.

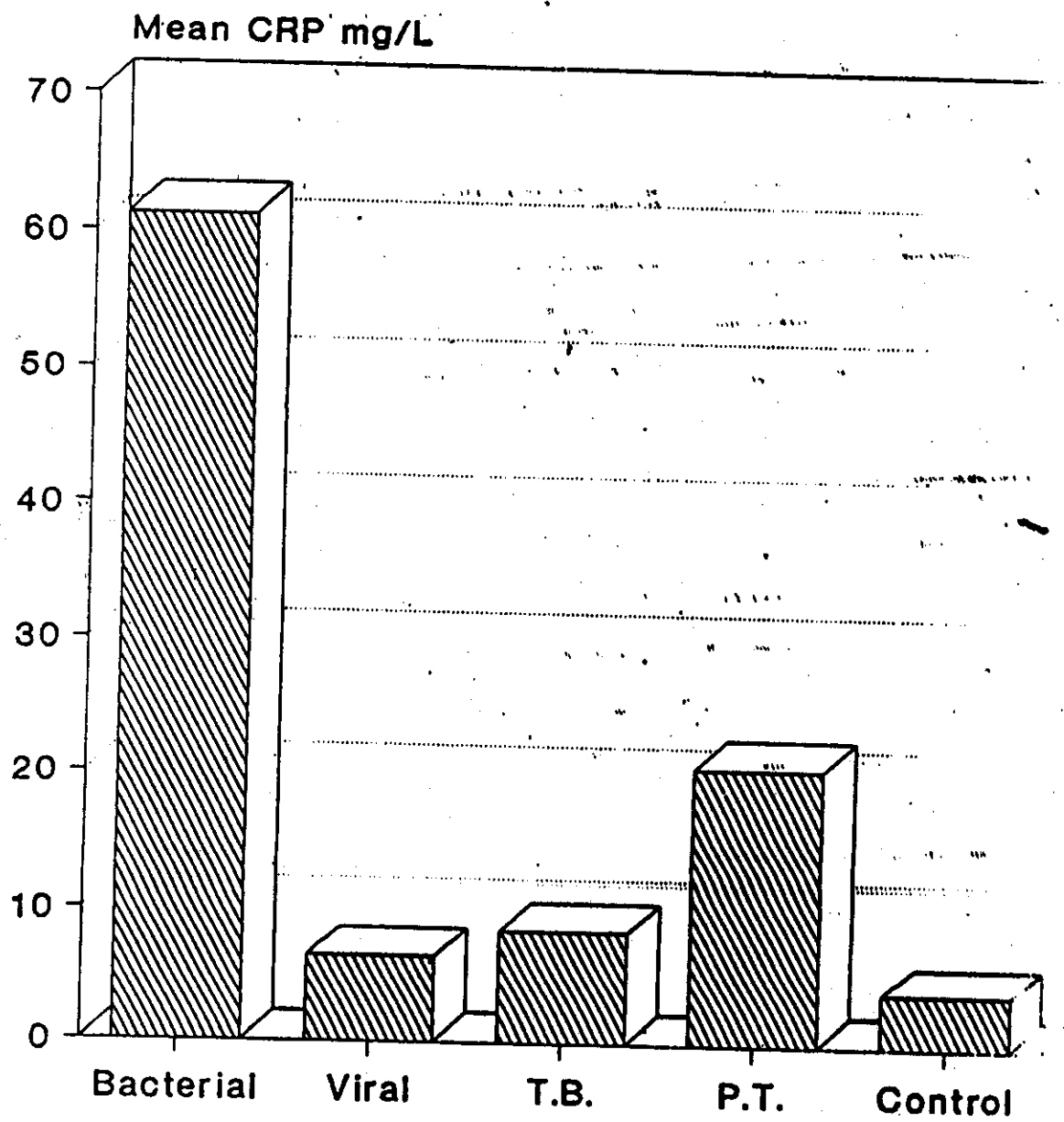


Fig.(1): Mean CRP mg/L among the studied groups.

Table (2), Figure (2) showed that :

- CSF protein concentration was significantly higher in bacterial, partially treated bacterial, T.B. groups than that of viral and control groups. In viral group it was significantly higher than control ($P < 0.001$).
- CSF glucose concentration was significantly decreased in bacterial, partially treated bacterial, T.B. groups than viral and control groups ($P < 0.05$).
- CSF chloride concentration was significantly lower in bacterial, partially treated bacterial, T.B., groups than control group ($P < 0.05$).
- CSF cells count was significantly higher in bacterial and partially treated bacterial groups than viral, T.B. and control groups. In T.B. group it was significantly higher than viral group and in viral group it was significantly higher than control ($P < 0.001$).

Table (2) : Comparative study among the different groups regarding different CSF parameters.

Studied groups variables	Bacterial N = 14 $\bar{X} \pm SE$ Range	Viral N = 11 $\bar{X} \pm SE$ Range	Partially treated bacterial N = 9 $\bar{X} \pm SE$ Range	T.B N = 7 $\bar{X} \pm SE$ Range	Febrile convulsion (control) N = 9 $\bar{X} \pm SE$ Range	F	P
CSF Protein (mg %)	211.71 $\pm$ 41.3 a (52 - 640)	43.82 $\pm$ 6.2 b (24 - 85)	129.82 $\pm$ 20.4 a (35 - 249)	206.86 $\pm$ 39.8 a (107 - 400)	28.11 $\pm$ 2.5 c (18 - 40)	10.663	< 0.001
CSF Glucose (mg %)	21.64 $\pm$ 2.5 a (7 - 40)	60.91 $\pm$ 3.5 b (40 - 76)	38.33 $\pm$ 8.5 ac (18 - 48)	41.0 $\pm$ 1.3 c (38 - 48)	62.11 $\pm$ 5.1 b (45 - 80)	10.323	< 0.05
CSF Chloride (mg%)	676.93 $\pm$ 5.13 a (630 - 700)	723.0 $\pm$ 3.8 ab (700 - 740)	696.44 $\pm$ 3.5 a (679 - 760)	410.7 $\pm$ 58.31 c (300 - 720)	738.78 $\pm$ 6.43 b (715 - 765)	10.887	< 0.05
CSF Cells / cmm	2570.0 ($\pm$ 456.9) a (710 - 5500)	93.82 ($\pm$ 10.2) c (60 - 160)	1571.11 ($\pm$ 234.5) a (1000 - 3200)	179.29 ($\pm$ 38.2) b (100 - 400)	6.67 ($\pm$ 2.3) d (0 - 20)	16.339	< 0.001

- Values are mean $\pm$ stander error, range in parentheses.

- Group means sharing same letter are not significantly different from each other

- P value < 0.05 is significant.

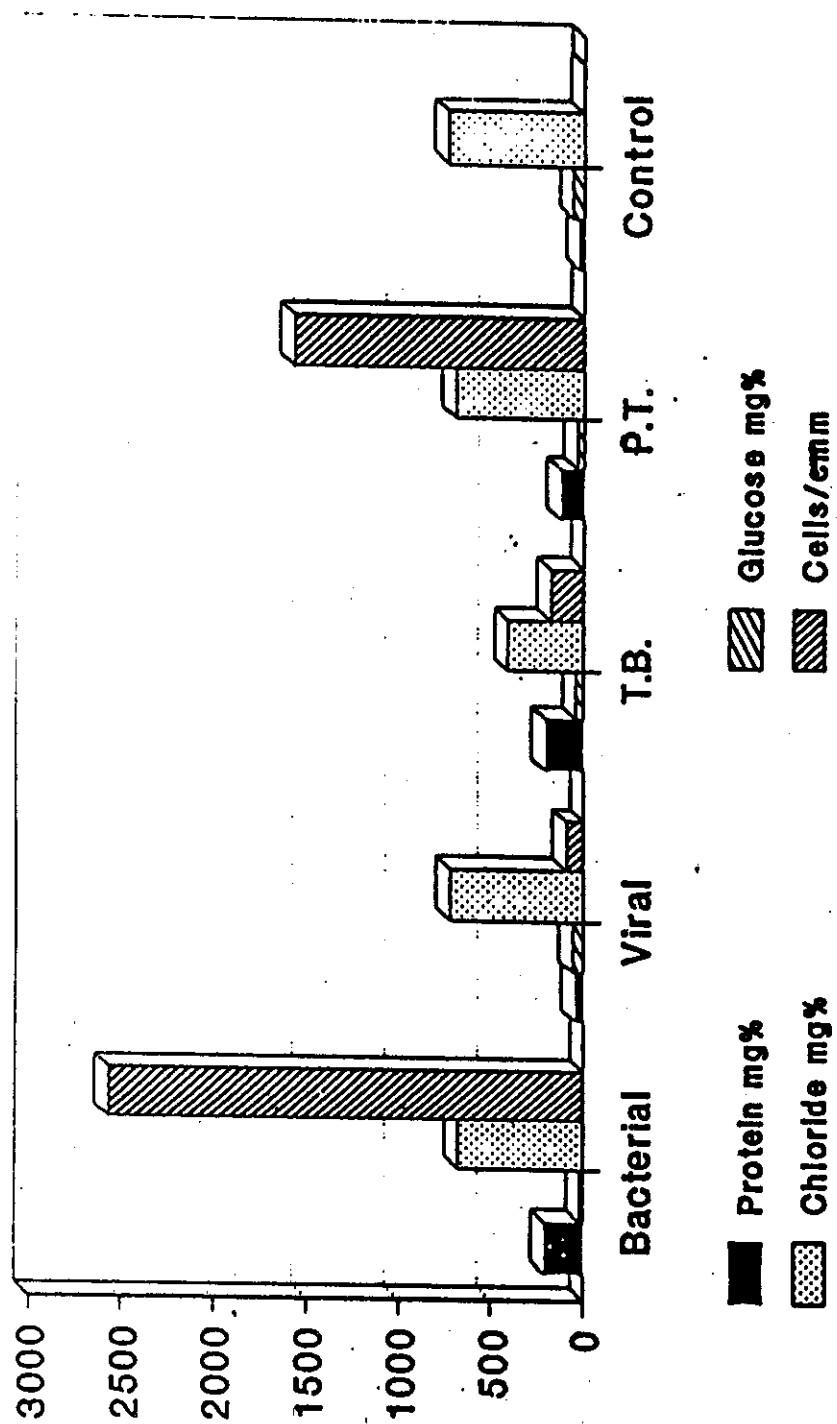


Fig.(2): Mean protein(mg%), glucose(mg%), chloride(mg%),cells /cmm among the studied groups.

Table (3), Figure (3) showed that :

- CSF IL-8 in bacterial group was significantly higher than of viral, T.B., partially treated and control groups. It was significantly higher in T.B. group and partially treated than viral and control groups ($P < 0.001$).
- Plasma IL-8 in bacterial group was significantly higher than of viral, T.B., partially treated and control groups ($P < 0.05$)

Table (3) Comparative study among the different groups regarding IL-8.

Studied groups variables	Bacterial N = 14 $\bar{X}$ ($\pm$ SE)	Viral N = 11 $\bar{X}$ ($\pm$ SE)	Partially treated bacterial N = 9 $\bar{X}$ ($\pm$ SE)	T.B $\bar{X}$ ($\pm$ SE)	Febrile convulsion (control) N = 9 $\bar{X}$ ($\pm$ SE)	F	P
CSF IL-8 pg / ml	320.6 $\pm$ 60.4 a (123.6 - 749.9)	31.59 $\pm$ 6.66 c (7.8 - 83.1)	150.1 $\pm$ 18.46 b (84.6 - 249.9)	149.21 $\pm$ 25.50 b (32.5 - 249.9)	18.62 $\pm$ 2.16 c (11.1 - 28.8)	9.747	0.001
Plasma IL-8 pg / ml	37.55 $\pm$ 6.99 a (11.4 - 114.9)	14.07 $\pm$ 1.89 b (4.3 - 23.7)	16.96 $\pm$ 1.84 b (15.7 - 27.4)	21.67 $\pm$ 1.58 b (15.7 - 29.3)	6.61 $\pm$ 0.34 c (5.3 - 8.4)	6.418	0.05

- Value are means $\pm$ stander error, range in parentheses.

- Group means sharing same letter are not significantly different from each other.

- P value < 0.05 is significant.

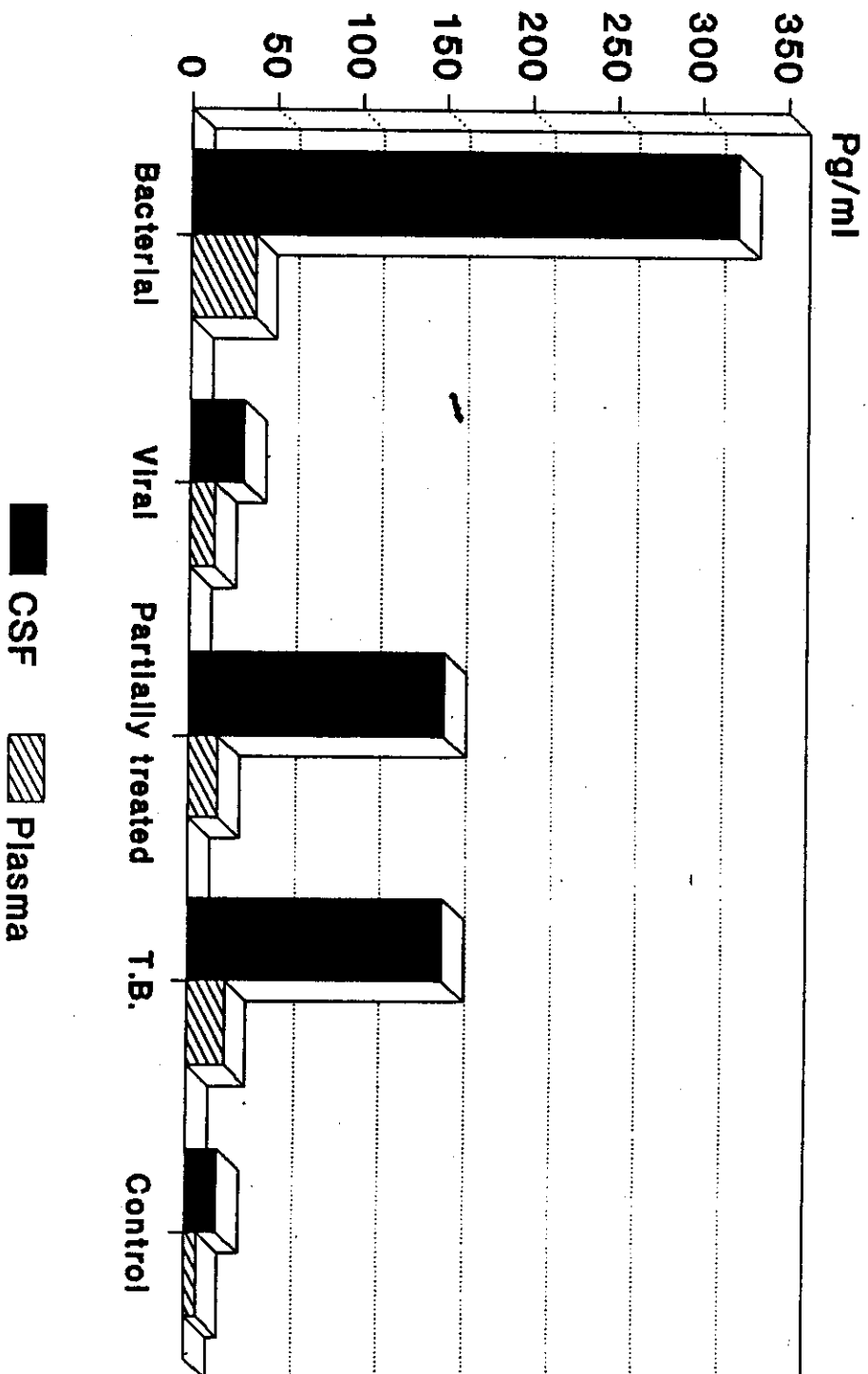


Fig.(3):CSF IL-8 (pg/ml) and plasma IL-8 (pg/ml) among the different groups.

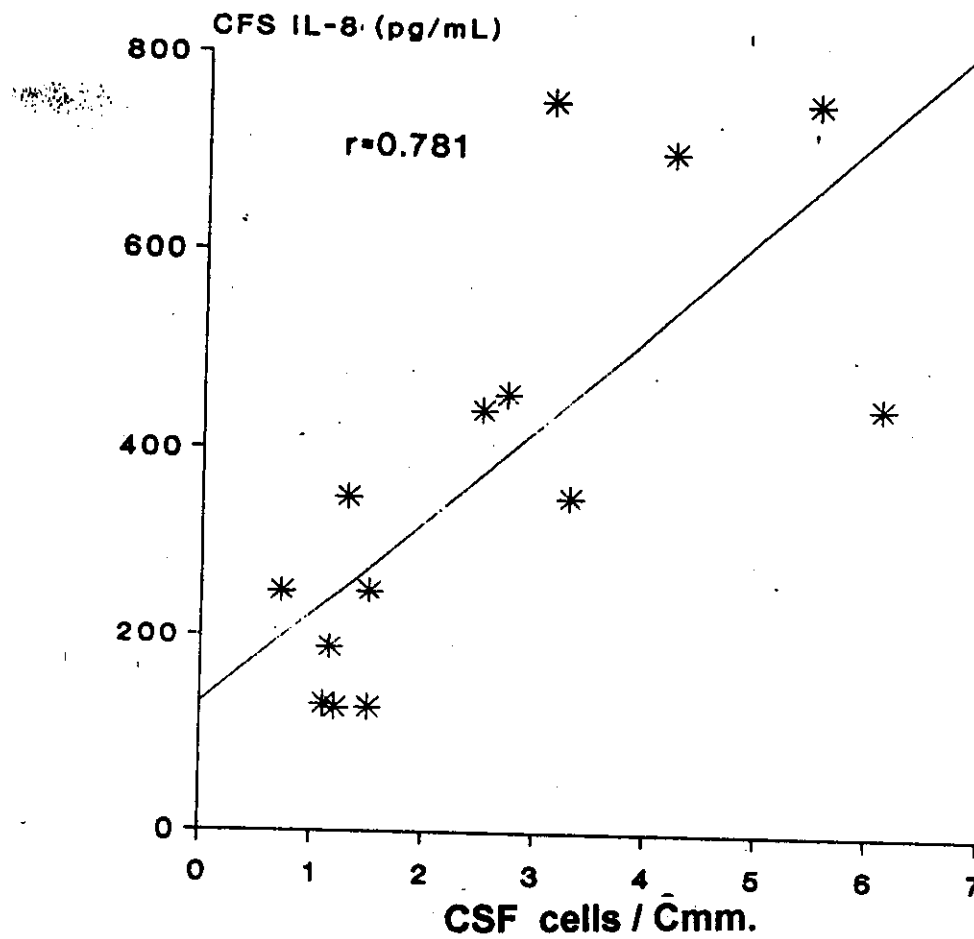
Table (4) : Correlation coefficient (r) and probability value (p) of the variables related to CSF IL-8 in bacterial groups.

Variables	CSF IL-8		Significance
	r	p	
Total leukocytic count / Cmm.	- 0.0192	> 0.05	not significant
Absolute neutrophil count/Cmm.	+ 0.0331	> 0.05	not significant
Absolute lymphocytic count /Cmm.	+ 0.278	> 0.05	not significant
Absolute monocytic count / Cmm.	+ 0.002	> 0.05	not significant
Absolute eosinophilic count /Cmm.	+ 0.102	> 0.05	not significant
Absolute basophilic count /Cmm.	+ 0.198	> 0.05	not significant
Serum CRP mg/L.	+ 0.505	> 0.05	not significant
Plasma IL-8 pg/ml.	+ 0.566	< 0.05	significant
CSF protein mg%.	+ 0.033	> 0.05	not significant
CSF glucose mg%.	+ 0.144	> 0.05	not significant
CSF chloride mg%.	- 0.289	> 0.05	not significant
CSF cells /Cmm.	+ 0.781	< 0.05	significant

Correlation coefficient (r) :

In bacterial group (r) value < 0.520 or > -0.520 is not significant P-value >0.05.

Table (4) and Figure (4),(5) showed that : There was positive significant correlation between plasma IL-8, CSF cells and CSF IL-8 in bacterial group.



Very good positive correlation

Figure (4) : Correlation between CSF IL-8 pg/ml and CSF cell /Cmm in bacterial group.

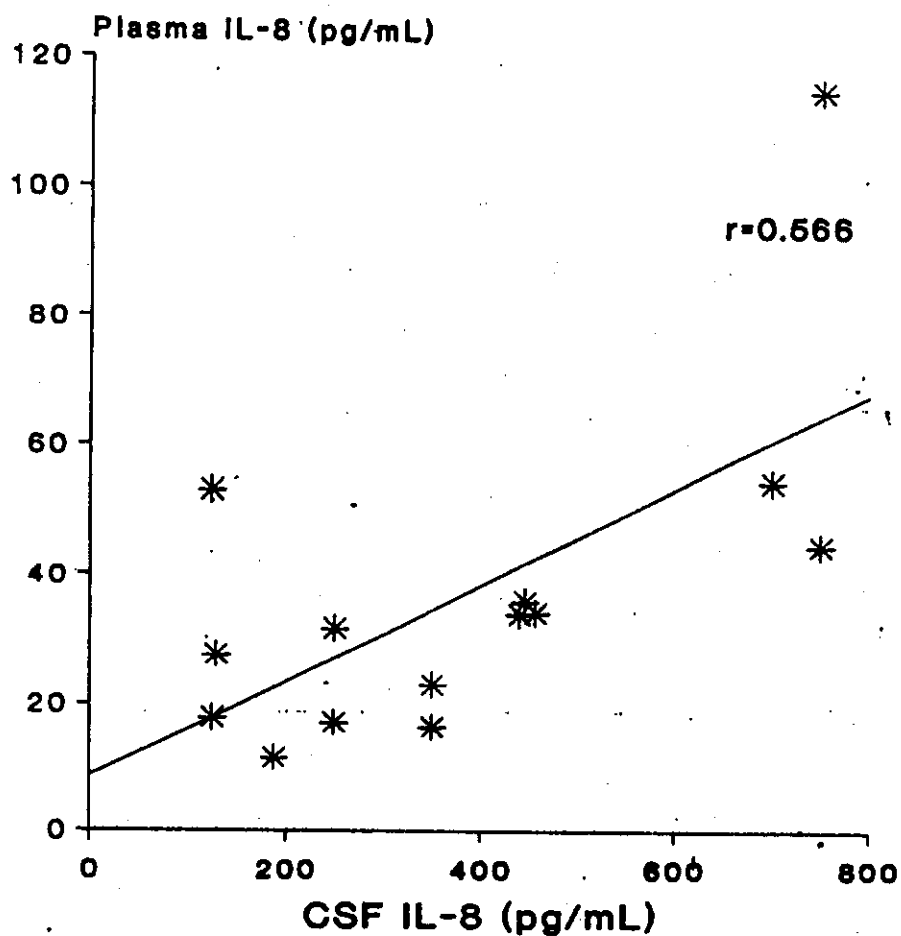
Table (5) : Correlation coefficient (r) and probability value (p) of the variables related to plasma IL-8 in bacterial group.

Variables	Plasma IL-8		Significance
	r	p	
Total leukocytic count / Cmm.	+ 0.123	> 0.05	not significant
Absolute neutrophil count/Cmm.	+ 0.130	> 0.05	not significant
Absolute lymphocytic count /Cmm.	+ 0.182	> 0.05	not significant
Absolute monocytic count / Cmm.	+ 0.363	> 0.05	not significant
Absolute eosinophilic count /Cmm.	+ 0.112	> 0.05	not significant
Absolute basophilic count /Cmm.	+ 0.100	> 0.05	not significant
Serum CRP mg/L.	+ 0.30.8	> 0.05	not significant
CSF IL-8 pg/ml.	+ 0.566	< 0.05	significant
CSF protein mg%.	- 0.248	> 0.05	not significant
CSF glucose mg%.	+ 0.250	> 0.05	not significant
CSF chloride mg%.	+ 0.007	> 0.05	not significant
CSF cells /Cmm.	+ 0.188	> 0.05	not significant

Correlation coefficient (r) :

In bacterial group (r) value < 0.520 or > - 0.520 is not significant, P-value >0.05.

Table (5), figure (5) showed that in bacterial group there was positive significant correlation between CSF IL-8 and plasma IL-8.



Moderate positive correlation

Figure (5) : Correlation between CSF IL-8 pg/ml and plasma IL-8 pg/ml in bacterial group.

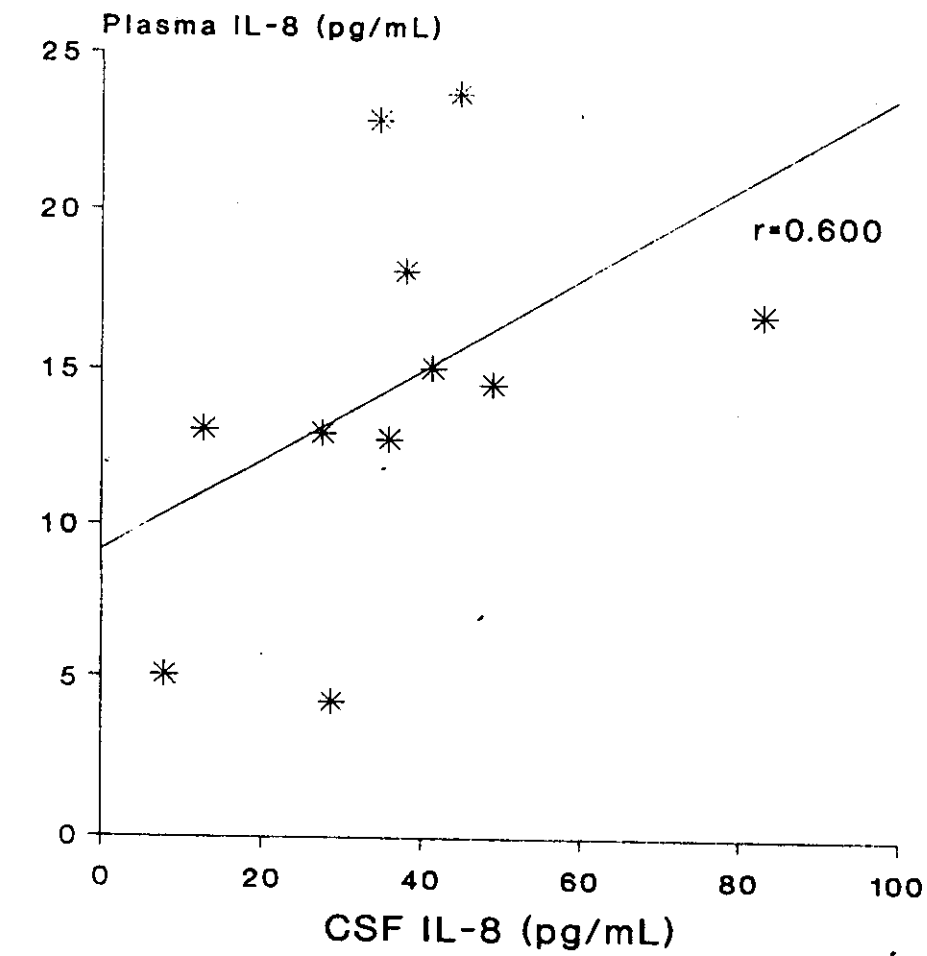
Table (6) : Correlation coefficient (r) and probability value (p) of the variables related to CSF IL-8 in viral group.

Variables	CSF IL-8		Significance
	r	p	
Total leukocytic count / Cmm.	+ 0.073	> 0.05	not significant
Absolute neutrophil count/Cmm.	+ 0.336	> 0.05	not significant
Absolute lymphocytic count /Cmm.	- 0.082	> 0.05	not significant
Absolute monocytic count / Cmm.	+ 0.191	> 0.05	not significant
Absolute eosinophilic count /Cmm.	+ 0.141	> 0.05	not significant
Absolute basophilic count /Cmm.			
Serum CRP mg/L.	- 0.285	> 0.05	not significant
Plasma IL-8 pg/ml.	+ 0.600	< 0.05	significant
CSF protein mg%.	- 0.248	> 0.05	not significant
CSF glucose mg%.	+ 0.250	> 0.05	not significant
CSF chloride mg%.	+ 0.170	> 0.05	not significant
CSF cells /Cmm.	- 0.323	> 0.05	not significant

Correlation coefficient (r) :

In viral group (r) value < 0.600 or > - 0.600 is not significant, P-value > 0.05.

Table (6), figure (6) showed that there was positive significant correlation between CSF IL-8 and plasma IL-8.



Moderate positive correlation

Figure (6) : Correlation between CSF IL-8 pg/ml and plasma IL-8pg/ml in viral group.

Table (7) : Correlation coefficient (r) and probability value (p) of the variables related to plasma IL-8 in viral group.

Variables	Plasma IL-8		Significance
	r	p	
Total leukocytic count / Cmm.	- 0.236	> 0.05	not significant
Absolute neutrophil count/Cmm.	+ 0.010	> 0.05	not significant
Absolute lymphocytic count /Cmm.	- 0.445	> 0.05	not significant
Absolute monocytic count / Cmm.	- 0.136	> 0.05	not significant
Absolute eosinophilic count /Cmm.	+ 0.112	> 0.05	not significant
Absolute basophilic count /Cmm.	-		
Serum CRP mg/L.	+ 0.047	> 0.05	not significant
Plasma IL-8 pg/ml.	+ 0.600	< 0.05	significant
CSF protein mg%.	- 0.179	> 0.05	not significant
CSF glucose mg%.	+ 0.229	> 0.05	not significant
CSF chloride mg%.	+ 0.091	> 0.05	not significant
CSF cells /Cmm.	+ 0.064	> 0.05	not significant

Correlation coefficient (r) :

In viral group : (r) value < 0.600 or > - 0.600 is not significant, P-value > 0.05.

Table (7) showed that there was positive significant correlation between plasma IL-8 and CSF IL-8.

Table (8) : Sensitivity and specificity of different variants in bacterial meningitis.

Test	CSF IL-8 Pg/ml	CSF cells /Cmm	CSF proteins mg%	CSF glucos mg%	Serum CRP mg/L
- sensitivity	100%	92.8%	78.6%	92.8%	100%
- sepcificity	100%	100%	100%	100%	100%
- positive predicitive value	100%	100%	100%	100%	100%
- Negative predicitive value	100%	95%	86.9%	95%	100%
- Effeiciency.	100%	97%	91%	95%	100%

Table (8) : Showed that, sensitivity of CSF IL-8 was 100% corresponding to 92.8% for CSF cells, 78.6% for CSF protein, 92.8% for CSF glucose and 100% for serum CRP.

Specificity of CSF IL-8 was 100% corresponding to specificity of CSF cells, protein, glucose and serum CRP were 100%.

Positive predicitive value of CSF IL-8 was 100% corresponding to positive predictive value of CSF cells, CSF protein, CSF glucose and serum CRP were 100%.

Negative predictive value of CSF IL-8 was 100% corresponding to 95% for CSF cells, 86.9% for CSF protein , 95% for CSF glucose and 100% for serum CRP.

Effeciency of CSF IL-8 was 100% corresponding to 97% for CSF cells, 91% for CSF proteins, 95% for CSF glucose and serum CRP 100%.

Table (9) : Master sheet for cases of bacterial meningitis. Number of cases (14) - Number of variables (28).

case No.	age (y)	sex	temper- ture	vomiting	headache	seizures	coma level	stiff neck	kerings sign	Brudzinski sign	Bulging fontanell	T.L.C. /cmm	A.N.C / cmm	A.L.C /cmm
1	11	M	40	+	+	-	III	-	+	+	+	8000	5120	2400
2	12	F	40	+	+	-	I	-	+	+	+	17200	10664	5848
3	2	F	39.7	+	-	+	I	-	+	+	+	14800	10952	3256
4	2.4	F	39.7	+	-	+	II	-	-	-	+	5700	3534	1710
5	12	F	39.7	+	+	+	I	-	+	+	+	6000	3600	1800
6	4.5	M	38	+	-	-	II	+	-	-	+	10700	7597	2461
7	8	F	39	+	+	-	I	-	+	+	+	7500	4875	2250
8	7	M	39.3	+	-	-	III	+	+	+	+	9800	6762	2352
9	9	M	39.3	+	+	+	I	-	+	+	+	28000	19880	6720
10	8.5	M	38.2	+	+	+	III	+	+	+	+	36000	24840	9360
11	7	F	39.2	+	+	+	I	+	+	+	+	12400	9042	2976
12	5	F	39.4	+	-	+	III	+	+	+	+	10700	6848	3424
13	7	M	40	+	-	+	II	+	+	-	+	11300	7232	3616
14	8	F	40.2	-	+	+	II	-	+	+	-	8900	5340	2848
X	9.03		39.4									13785.7	9021.1	3643.4
S.D. ±	5.35		0.67									8651.6	6171.2	2183.4
SE												2313.3	1690.1	583.8
%				93	57	64	28	43	86	79	93			

% = number of cases in percentage

$\bar{X}$ = mean

± S.D = stander deviation

± SE = Stander error

M = Male

F = Female

*Coma level garding according to glasgow coma scale

*Coma grade I = (score > 8)

*Coma grade II = (score 5-8)

*Coma grade III = (score < 5)

(Behrman et al., 1992)

T.L.C. = total leucocytic count

A.N.C. = Absolute neutrophile count

A.L.C = Absolute lymphocytic count

Table (9) Conti.

A.M.C. enm	A.E.C. enm	A.B.C. enm	Plasma II-8 pg ml	Serum CRP mg l.	CSF appearance	CSF pressure	CSF protein mg ^o /o	CSF Glucose mg ^o /o	CSF chloride mg ^o /o	CSF cells enm	CSF predominant cells	CSF II-8 pg ml	bacterial cultures
320	160	0	35.94	60	Turbid	++	280	15	630	1500	P	445.82	Neisseria* meningitidis
344	344	0	23.04	54	Turbid	++	155	25	645	2500	P	349.89	Neisseria meningitidis
296	296	0	53.00	54	Turbid	++	148	20	676	1200	P	123.55	Haemophilus influenzae
285	171	0	34.26	60	Turbid	++	326	35	680	2720	P	456.47	Haemophilus influenzae
420	180	0	11.36	60	Turbid	++	158	15	691	6100	P	187.20	Neisseria meningitidis
428	214	0	16.36	72	Turbid	++	640	7	687	710	P	349.89	Haemophilus influenzae
225	150	0	17.78	48	Turbid	++	255	40	679	1500	P	124.00	Neisseria meningitidis
294	392	0	114.91	72	Turbid	++	362	25	693	3300	P	749.89	Neisseria*D meningitidis
560	840	0	17.07	36	Turbid	++	165	20	692	1200	P	249.09	Neisseria meningitidis
720	1080	0	44.68	90	Turbid	++	82	24	672	1150	P	749.89	Haemophilus*D influenzae
372	372	0	27.61	36	Turbid	++	99	16	700	3100	P	127.75	Neisseria meningitidis
214	214	0	54.50	90	Turbid	++	52	18	687	4200	P	699.80	Haemophilus*D influenzae
226	113	113	31.79	54	Turbid	++	120	23	666	5500	P	249.89	streptococcal pneumoniae
267	356	0	43.36	72	Turbid	++	122	20	679	1300	P	246.09	Haemophilus influenzae
355.1	348.3	8.1	37.55	61.3			211.7	21.6	676.9	2570		320.67	
141.3	278.6	30.2	26.15	16.7			154.3	8.3	19.2	1702.4		225.82	
37.8	74.50	8.0	6.99	4.47			41.3	2.5	5.13	456.9		60.4	

A.M.C. = Absolute monocytic count

A.E.C. = Absolute eosinophile count

A.B.C. = Absolute basophile count.

CRP C - reactive protein

P = polymorphieis

* D = (died)

Table (10) : Master sheet for cases of viral meningitis. Number of cases (11) - Number of variables (28)

case No.	age (y)	sex	temper- ature	vomiting	headache	seizures	coma level	stiff neck	kerings sign	Brudzinsket sign	Budging fontanell	# T.L.C. /cmm	# A.N.C. /cmm	# A.L.C. /cmm
15	12	M	39.2	+	+	+	I	+	+	+	+	6400	3660	1980
16	8	M	39.5	+	+	-	I	+	+	+	+	8400	4620	3444
17	2.5	F	40	+	-	-	I	-	-	-	+	9700	4947	4171
18	9	F	40.2	+	+	+	I	-	+	+	-	9200	4692	3956
19	4.5	M	39.2	+	-	-	I	-	+	+	-	9400	4794	4136
20	4	F	40	+	-	-	I	+	+	+	-	6400	3328	2560
21	1.5	M	39.3	-	-	+	I	-	-	-	-	7650	4820	2448
22	1.4	M	40	-	-	-	I	-	-	-	-	10400	4992	5096
23	1	M	39.3	+	-	-	I	-	+	-	-	6100	3538	2135
24	8	M	40	+	+	-	I	+	+	+	-	7100	3763	2982
25	3	M	38	+	-	-	I	-	+	-	-	8000	5120	2480
$\bar{X}$	5.9		39.6									8031.8	4388	3216.0
$\pm S.D$	3.9		0.63									1526	669.0	1009.2
$\pm S.E.$												459.0	201.5	303.9
%				82	36	27	100	36	73	55	27			

Table (10): Conti

A.M.C. mm	A.E.C. mm	A.B.C mm	Plasma II-8 pg ml	Serum CRP mg l.	CSF appearance	CSF pressure	CSF protein mg ⁶ %	CSF Glucose mg ⁶ %	CSF chloride mg ⁶ %	CSF cells cmm	CSF predominant cells	CSF II-6 pg ml	bacterial cultures
240	120	0	23.7	18	Clear	+++	24	59	700	60	L	44.70	negative
252	168	0	5.08	12	Clear	+++	35	40	711	150	L	7.78	negative
388	194	0	22.84	0	Clear	+++	43	71	715	70	L	34.65	negative
460	276	0	4.26	6	Clear	+	42	55	721	100	L	28.67	negative
282	188	0	12.74	0	Clear	+	82	65	718	60	L	35.85	negative
320	192	0	12.94	6	Clear	+	38	62	730	80	L	27.56	negative
230	153	0	16.74	0	Clear	+	85	76	723	60	L	83.09	negative
208	104	0	114.52	6	Clear	+	35	62	718	72	L	49.00	negative
244	183	0	13.06	12	Clear	+	25	75	739	80	L	12.66	negative
213	142	0	10.26	0	Clear	+	38	62	738	100	L	20.56	negative
240	160	0	18.7	12	Clear	+	35	43	740	160	L	22.67	negative
279.7	146.6	0	14.07	6.55			43.8	60.9	723	93.8		31.59	
79.5	41.2	0	6.26	6.27			20.5	11.6	12.7	33.7		22.05	
23.95	12.41		1.89	1.9			6.2	3.5	3.8	10.2		6.66	

L = Lymphocyte

Table (11) : Master sheet for cases of partially treated bacterial meningitis - Number of cases (9) , Number of variable (28).

case No	age (y)	sex	temper- ature	vomiting	headache	seizures	coma level	stiff neck	kerings sign	Brudzinski sign	Bulging fontanel	* T.L.C /cmm	* A.N.C /cmm	* A.L.C /cmm
26	11	M	38.5	+	+	-	I	-	+	+	-	12000	8400	3120
27	8	M	39.3	+	+	+	II	+	+	+	-	9000	6210	2250
28	10.5	M	39.2	+	+	-	I	-	+	+	-	18250	11215	6023
29	7	M	38.2	-	-	-	I	+	-	-	-	12400	9025	2976
30	11.5	F	39.5	-	+	-	I	+	+	+	-	11600	8468	2668
31	2.5	M	39.2	+	-	-	I	+	+	+	-	17000	11220	5100
32	5	F	39.0	+	-	-	I	-	+	+	-	13500	8775	4320
33	2	M	39.5	+	-	-	I	-	-	-	-	6800	4216	2176
34	6	F	38.3	+	+	+	I	+	-	-	-	7800	5148	2262
$\bar{X}$	7.1		38.9									12038	7964	3432
S.D. $\pm$	3.5		0.49									3877	2353	1392
S.E $\pm$												1292.3	784.3	464
%				78	56	22		56	67	67	0			

Table (11) : Conti.

A.M.C. num	A.E.C. num	A.B.C. num	Plasma IL-8 pg/ml	*Serum CRP mg l	CSF appearance	CSF pressure	CSF protein mg%	CSF Glucose mg%	CSF chloride mg%	CSF cells/mm	CSF predominant cells	CSF IL-8 pg ml	bacterial cultures
240	240	0	9.92	0	Turbid	++	95	20	700	1200	P	112.02	negative
270	270	0	22.13	30	Turbid	++	99	25	685	1200	P	195.85	negative
365	548	0	14.55	36	Turbid	++	86	45	679	1400	P	119.85	negative
248	124	0	18.06	12	Turbid	+	162	22	701	1100	P	249.89	negative
232	232	0	13.7	24	Turbid	++	152	24	696	2200	P	84.63	negative
340	340	0	17.35	36	Turbid	++	164	48	760	1500	P	144.7	negative
270	135	0	20.06	36	Turbid	+	249	18	696	3200	P	150.2	negative
204	204	0	11.55	0	Turbid	++	35	95	720	1000	P	167.8	negative
234	156	0	15.13	12	Turbid	+	121	48	691	1340	P	110.02	negative
271	249.8	0	16.96	20.7			129	38.3	696	1571		150.1	
52.6	131.1	0	5.53	15.0			61.3	24.6	11.5	703.6		55.4	
17.5	43.7		1.84	5.0			20.4	8.5	3.8	234.5		18.46	

P = Polymorph

Table (12) : Master sheet for cases of tuberculas meningitis - Number of cases (7) - Number of variable (28).

case No	age (y)	sex	temper- ature	vomiting	headache	seizures	coma level	stiff neck	kerings sign	Brudzinski sign	Bulging fontanelle	T.L.C. /cmm	A.N.C./ cmm	A.L.C /cmm
35	12	F	38.5	+	+	+	II	+	+	+	+	4800	2400	1968
36	6	F	39.5	+	+	+	I	+	+	-	-	12000	5520	6000
37	13	M	38.3	+	+	+	I	+	+	-	-	12200	6100	5124
38	3	F	39	+	-	+	I	+	+	+	-	9000	5220	3150
39	4	M	39.5	+	-	+	I	+	+	+	+	12000	6600	4920
40	6	M	38.5	+	+	+	I	+	-	-	-	11000	4840	5500
41	9	M	38	+	+	+	I	-	+	+	+	11500	6555	4600
N	7.1		38.9									10357	5319	4466
S.D. ±	3.9		0.49									2684	1447	1417
S.E. ±												1012.8	546.0	534.7
%				100	71	100		86	86	57	43			

Table (12) : Conti.

A.M.C enum	A.E.C enum	A.B.C enum	Plasma IL-8 pg/ml	Serum CRP mg/l	CSF appearance	CSF pressure	CSF protein mg ^o	CSF Glucose mg ^o	CSF chloride mg ^o	CSF cells/mm	CSF predominant cells	CSF IL-8 pg/ml	bacterial cultures
240	192	0	29.28	12	Clear	++	107	40	720	400 ^o	L	150.08	Positive
360	120	0	20.72	24	Clear	++	400	43	340	200	L	249.89	Positive
610	366	0	15.71	0	Clear	++	200	38	506	100	L	32.49	Positive
450	180	0	23.24	6	Clear	+	120	38	303	140	L	201.83	Positive
360	120	0	21.76	12	Clear	++	230	48	300	120	L	149.29	Positive
220	440	0	18.71	0	Clear	++	121	40	307	150	L	120.89	Positive
230	115	0	22.25	6	Clear	+	270	40	405	145	L	140.08	Positive
352.9	219	0	21.67	57			206	41.0	410	179		149.21	
142.0	131.1	0	4.21	3.38			105	3.5	154	102		6.59	
53.18	49.5		1.58	3.1			39.8	1.3	58.3	38.2		25.50	

L = Lymphocyte.

Table (13) : Master sheet for febrile convulsion (control) - Number of cases (9) - Number of variables (28).

case No	age (y)	sex	temper- ature	vomiting	headach	seizures	coma level	stiff neck	kerings sign	Brad/msec sign	Budging fontanel	T.L.C. /cmm	A.N.C. / cmm	A.L.C /cmm
42	2	M	39.5	+	-	+	-	-	-	-	-	8700	5481	2784
43	1.8	M	39.5	-	-	+	-	-	-	-	-	7500	5100	2025
44	1.6	F	40	-	-	+	-	-	-	-	-	7200	4104	2664
45	2.5	F	40	-	-	+	-	-	-	-	-	6400	3584	2304
46	2.5	F	39.2	-	-	+	-	-	-	-	-	6800	3808	2516
47	8	M	39.3	+	+	+	-	-	-	-	-	9600	5856	3360
48	2	M	39.8	+	-	+	-	-	-	-	-	8100	3969	3564
49	2.5	M	40.2	-	-	+	-	-	-	-	-	10000	4900	4500
50	4	M	39.8	+	-	+	-	-	-	-	-	8100	3888	3645
$\bar{x}$	5.0		39.7									8044	4521	3017
$\pm$ S.D.	5.9		0.34									1221	825	1048
$\pm$ S.E.												407	275	349.3
%				44	11	100	0	0	0	0	0			

* Cases with febrile convulsion were invited as control groups

Table (13) : Conti.

A.M.C. cmm	A.E.C. cmm	A.B.C. cmm	Plasma II.-8 pg/ml	Serum CRP mg/l.	CSF appearance	CSF pressure	CSF protein mg ¹⁰⁰	CSF Glucose mg ¹⁰⁰	CSF chloride mg ¹⁰⁰	CSF cells cmm	CSF predominant cells	CSF II.-8 pg/ml	bacterial cultures
261	174	0	6.51	6	Clear	+	20	80	760	0	-	28.83	negative
300	225	0	6.00	0	Clear	+	30	56	759	5	-	28.06	negative
360	72	0	8.36	0	Clear	+	20	65	765	11	-	11.08	negative
384	128	0	5.94	0	Clear	+	30	75	728	5	-	20.57	negative
340	136	0	5.27	6	Clear	+	35	76	717	20	P	19.69	negative
288	46	0	6.93	6	Clear	-	18	54	723	10	-	14.8	negative
324	243	0	7.46	6	Clear	-	30	72	738	15	P	17.66	negative
400	200	0	5.50	6	Clear	-	30	63	744	5	-	11.08	negative
324	243	0	7.51	6	Clear	-	40	45	715	20	P	15.69	negative
331.2	129	0	6.61	4.0			28.1	62.1	738	6.7		18.62	
45.1	66.3	0	1.04	3.0			7.4	15.3	19.3	7.1		6.48	
15	22.1		0.34	0.1			2.5	5.1	6.43	2.3		2.16	