

Results

Forty five psoriatic patients were randomly selected and included in this study . They were twenty six females and nineteen males . Their ages were ranging from 7 years to 67 years [Mean 33.2 , \pm 16.9] .

1- The results of the clinical data , revealed the following findings :-Tables (1-4)

There was significant increase in age of onset with increase severity of disease and insignificant increase in duration with increase severity of disease .

History of relation to stress was detected in 11 cases [24.4%] and family History in 17 cases [37.8%] .

Presence of pruritus was observed in 31 cases [68.9%] .

Stress , Family History and pruritus has no relation to severity of disease .

History of throat infection was found in 17 cases [37.8 %]

Presence of nail involvement in 14 cases [31.1%] and there is increase in nail involvement with increase severity .

Presence of arthritis in 5 cases [11.1%] and present only in severe cases .

According to clinical severity scoring , their were:

Fifteen mild cases .

Fifteen moderate cases .

Fifteen severe cases .

According to type :

guttate type in 12 cases [26.7%] .

plaque type in 33 cases [73.3%] .

Table (1) Age and sex distribution :-

	Case n = 45	Control n = 15	test of significance	Pvalue
Age [years]:- \bar{X}	33.2	34.2	t = -0.21	> 0.05
SD	16.9	10.3		
Sex :-			$\chi^2 = 0.09$	> 0.05
male	19 [42.2]	7 [46.7]		
female	26 [57.8]	8 [53.3]		

Table (2) Age of onset and duration of illness:-

	Total $\bar{X} \pm SD$	mild $\bar{X} \pm SD$	moderate $\bar{X} \pm SD$	sever $\bar{X} \pm SD$	F test	P
Age of onset	28.6 \pm 16.4	15.6 \pm 9.7	29.5 \pm 7.6	40.7 \pm 18.9	13.97	< 0.001
duration	4.6 \pm 3.2	3.8 \pm 2.5	4.4 \pm 1.95	5.9 \pm 4.3	2.09	> 0.05

Table (3) Stress , family history clinical data of Ps. Patients:-

	Total No [%]	mild No [%]	moderate No [%]	sever No [%]
Stress	11 [24.4]	1 [6.7]	8 [53.3]	2 [13.3]
Family History	17 [37.8]	4 [26.7]	8 [53.3]	5 [33.3]
Pruritus	31 [68.9]	9 [60.0]	12 [80.0]	10 [66.7]
Nail	14 [31.1]	2 [13.3]	3 [20.0]	9 [60.0]
Arthritis	5 [11.1]	- [0.0]	- [0.0]	5 [33.3]

Table (4) Types and severity of psoriatic Cases :

	Total no [%]	mild no [%]	moderate no [%]	sever no [%]	test of significance
PASI X \pm SD	22.1 \pm 19.9	4.1 \pm 2.2	14.4 \pm 4.9	47.8 \pm 10.5	F=167.9
Type:- guttate	12 [26.7]	7 [46.7]	5 [33.3]	- [0.0]	
plaque	33 [73.3]	8 [53.3]	10 [66.7]	15	

2-The results of laboratory investigation :-

I-Bacteriological examination of throat swabs Tables from 5:10 and Figuers from 1:4 .

- Ahighly significant increase in positive [+ve] throat swab was observed in patients Compared to Controls as shown in table (5) and figuer (1) .
- ODD's ratio = 8.5 , 95% Confidence interval [0.99 - 188.3] .
The risk of positivity of throat swab in psoriasis patients is about 9 folds more than in Controls .
- Mild Cases show high positive throat swabs than moderate Cases while there is no +ve throat swab in severe Cases as shown in table (5) .
- Also all guttate cases are throat [+ve] and the majority of cases [plaque] are throat [-ve] and there is significant value between throat [+ve] and throat [-ve] .shown in table [6] .

II- ICAM-3 measurement in serum :

- The individual data of ICAM-3 value [ng/ml] in sera of Controls and psoriatic patients are seen in (table 7) .
- There was significant increase in level of ICAM-3 in patients in Comparison to Controls [$P < 0.001$] .
There was significant increase in ICAM-3 level in severe cases from moderate cases which from mild and moderate cases from mild cases as shown in [table 7] and figuer (2)
- level of ICAM-3 in plaque cases was more than guttate cases and there is significant value between them .
- Level of ICAM-3 in throat swab positive in both mild and moderate Cases

was significantly increased than in throat swab negative in both mild and moderate cases as shown in [table 9] and [figuer 3].

- Level of ICAM-3 is significanty increased with increase severity of the disease as shown in [table 10] and [figuer 4].

Table (5) Group (A) streptococci in throat swab of the psoriatic patients and the control :-

	Control n : 15	Total Patients n : 45	Mild n : 15	Moderate n : 15	Severe n : 15
+ ve	1(6.7%)	17(37.8%)	11(73.3%)	6(40%)	-(0.0%)
- ve	14(93.3%)	28(62.2%)	4(26.7%)	9(60%)	15(100%)
P value	P < 0.025		P < 0.001		

Table (6) Group (A) streptococci and the clinical types of psoriasis :

Variable Type	guttate No [%] no of cases=12	plaque No [%] no of cases=33	test of significance	P value
Mild	7 [58.3]	8 [24.2]	-	-
Moderate	5 [41.7]	10 [30.3]		
Severe	- [0.0]	15 [45.5]		
Throat swab				
+ ve	12 [100%]	5 [15.2]	Fisher's	< 0.001
- ve	- [0.0]	28 [84.8]	exact	

Table (7) The mean \pm SD of cICAM-3 (ng/ml) levels in patients and controls :-

ICAM3	mild	moderate	severe	total	cotrol
Mean \pm SD(ng/ml)	35.4 \pm 2.5	45.9 \pm 3.9	63.6 \pm 5.4	48.3 \pm 12.4	27.8 \pm 1.8
test of significance	F = 179.4			t = 10.77	
P value	< 0.001			< 0.001	

Table (8) The mean \pm SD of cICAM-3 (ng/ml) in guttate and plaque type of psoriasis :-

Type	guttate no = 12	plaque no = 33
ICAM-3	41.9 \pm 7.2	50.6 \pm 13.2

N.B. t = -2.8

p < 0.01

Table (9) The mean \pm SD of cICAM-3 (ng/ml) levels in relation to positivity of the throat swabs :-

ICAM-3 severity +swabs	$\bar{X} \pm SD$	test of significance	P value
Mild:- +ve swab n=11	36.6 \pm 1.7	t = -4.8	< 0.001
-ve swab n= 4	32.2 \pm 0.6		
Moderate:- + ve swab n=6	49.9 \pm 1.7	t = -6.31	< 0.001
- ve swab n= 9	43.2 \pm 2.3		

Table (10) ICAM-3 concentration in relation to severity in -ve swabs patients :-

ICAM-3 severity	$X \pm SD$
Mild n = 4	32.2 \pm 0.6
Moderate n = 9	43.2 \pm 2.3
Severe n = 15	63.6 \pm 5.4
F test =119.98	P < 0.001

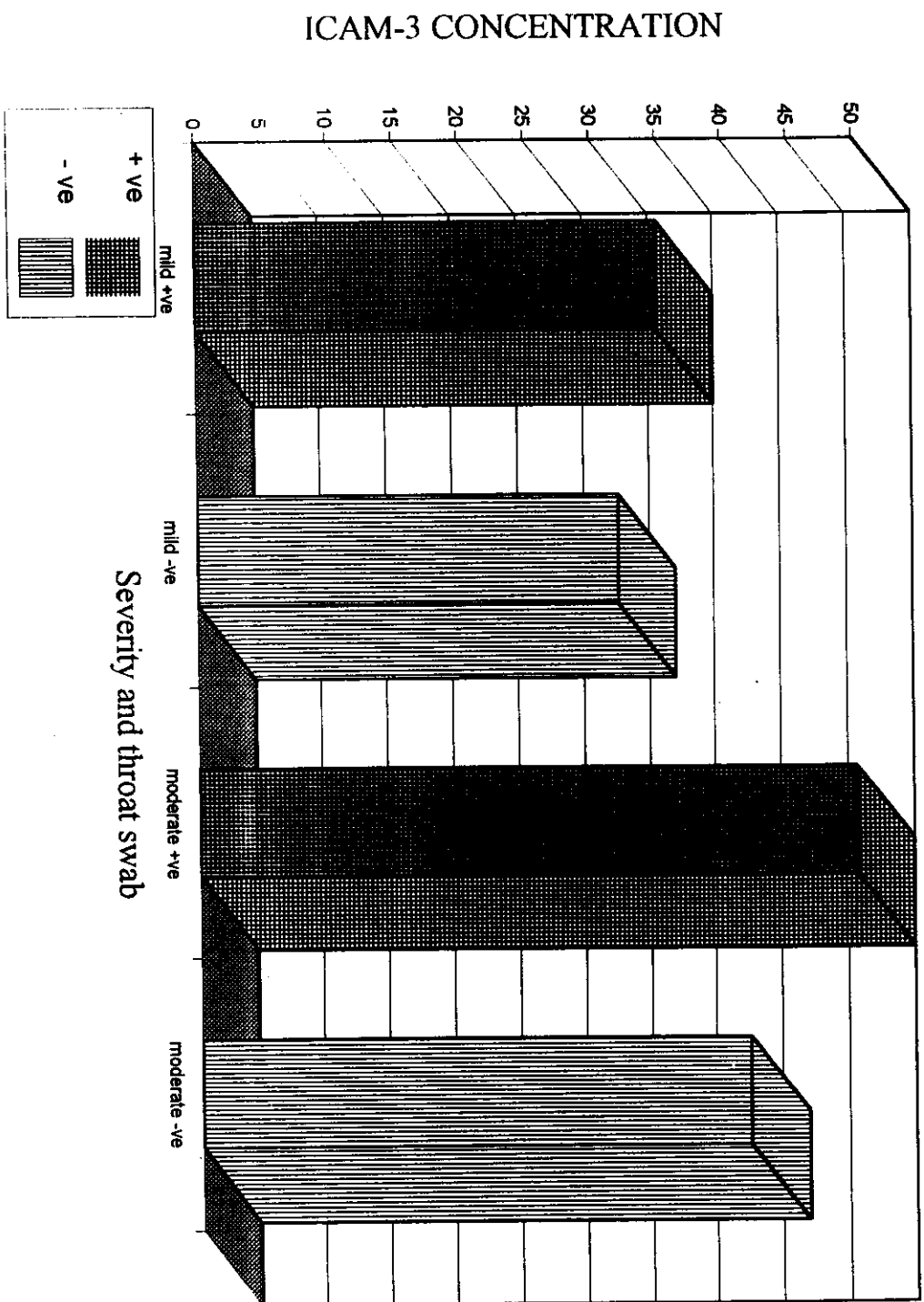


Fig. (3) Showing concentration in relation to severity and throat swab positivity
Mild and Moderate cases .

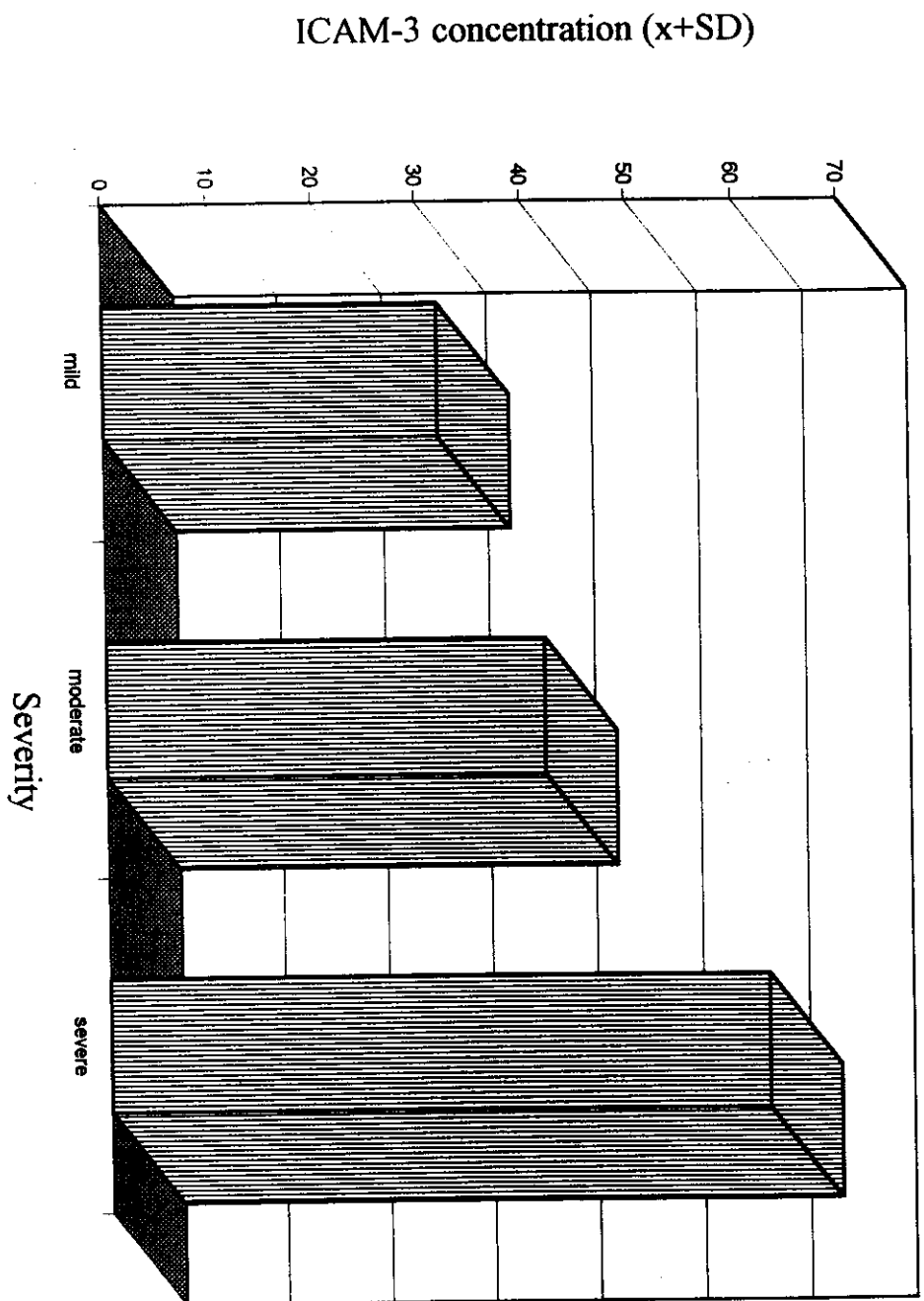


Fig. (4) Showing ICAM-3 Concentration in relation to severity in -ve swab patients