RESULTS

Comparison between multipara RA group and multipara control group, according to the demographic characters,CD_{34} &CD_{38} is shown in table (1).

The mean age in multipara RA group was 37.85 ± 9.449 and ranged between 26 – 60 years while in healthy multipara control group the mean age was 29.20 ± 7.376 and ranged between 19 – 40 years.

The mean of number of off springs in multipara RA group was 3.55 ± 1.276 and ranged between 1 – 6, while mean number of off spring in multipara control group was 2.30 ± 1.549 and ranged between 1 – 5 .

The mean of CD_{34} in multipara RA group was 46.11 ± 20.218 and ranged from 21.44 to 83.09. While, the mean of CD_{34} in multipara control group was 37.62 ± 19.177 and ranged from 10.19 – 69.25 the comparison between both groups according CD_{34} was insignificant ($P > 0.05$).

The mean of CD_{38} in multipara RA group was 35.64 ± 18.878 and ranged from 16.13 to 64.08 while the mean of CD_{38} in multipara control group was 26.41 ± 13.925 and ranged from 6.61 – 46.83 the comparison between groups according to CD_{38} was insignificant ($P < 0.05$).

Table (2) shows comparison between nullipara RA & nullipara control group according age, CD_{34} and CD_{38}.

The mean age in nullipara RA group was 24.50 ± 3.749 and ranged between (21 -30 years). While in healthy control the mean age was 24.20 ± 4.050 and ranged between 18 – 30 years.

The mean of CD_{34} in nullipara RA group was 24.50 ± 3.749 and ranged between (21 – 30 years). While in healthy control the mean age was 24.20 ± 4.050 and ranged between 18 – 30 years.

The mean of CD_{34} in nullipara Ra group was 10.66 ± 3.980 and ranged from (3.67 – 14.35). While the mean of CD_{34} in nullipara control group was 16.08 ± 21.105 and ranged from 5.11 – 16.68.

The comparison between both groups according to CD_{34} was insignificant $P > 0.05$.

The mean of CD_{38} in nullipara RA group was 9.67± 3.077 and ranged between 5.29 – 14.92, while the mean of CD_{38} in control group was 7.10 ± 3.376 and ranged from 2.18 – 13.22 the comparison between both groups according to CD_{38} was insignificant ($P > 0.05$).

Table (3) shows comparison between male RA group and male control group according age, CD_{34} and CD_{38}.

The mean age in RA male group was 47.00 ± 8.794 and ranged from 35 - 60 while the mean age in male control group was 35.80 ± 6.233 and ranged from 26 – 45 years.

The mean of CD_{34} in male RA group was 14.25 ± 9.557 and ranged from 9.02 – 29.73 while the mean of CD_{34} in male control group was 11.57 ± 3.301 and ranged between 6.74 – 1467.

The comparison between both groups according CD_{34} was insignificant ($P > 0.05$).

The mean of CD_{38} in male RA group was 14.99 ± 6.894 and ranged between 18.73 – 28.07, while the mean of CD_{38} in male control group was 9.34 ± 3.365 and ranged between 6.19 – 14.95.

The comparison between both groups according to CD_{38} was significant ($P < 0.05$).

Table (4) shows correlation between CD_{34} and CD_{38} and different variables in multipara RA group. It shows positive correlation between CD_{34} and CD_{38}, ESR, number of off springs, morning stiffness, disease duration, age , Hb , articular index and articular index of the hand and it was highly significant with CD_{38}, number of off springs, disease duration and age ($P < 0.05$) .

It also shows +ve correlation between CD_{38} and CD_{34}, Hb , ESR, number of off spring, Morning stiffness, duration of the disease, age, articular index and articular index of the hand. It was highly significant between CD38+& CD_{34}, number of offspring and age ($P < 0.05$) .

Table (5) shows correlation between CD_{34} and CD_{38} and different variables in nullipara RA group.

It shows significant +ve correlation between CD_{34} & CD_{38} ($P < 0.05$) ,and between CD34+and disease duration. It also shows–ve correlation between CD_{34} and ESR, Hb, morning stiffness, disease duration, age, articular index and articular index of the hand ($P > 0.05$).

It also shows +ve correlation between CD_{38} and CD_{34}($P < 0.05$) and disease duration, and –ve correlation between CD_{38} and all other different variable ($P > 0.05$).

Table (6) shows correlation between CD_{34} and CD_{38} and different variable in male RA group.

It shows highly significant +ve correlation between CD_{34} & CD_{38} ($P < 0.05$) &– ve correlation between CD_{34}, CD_{38} and all other different variables ($P > 0.05$).

Table (7) shows the comparison between the diseased groups as regadsCD34+ and CD38+,it is highly significant in multipara group ($P < 0.001$).

Comparison between the presence of deformities in the diseased groups and CD34+,CD38+ is shown in tables(8-9-10) highly significant between multipara and CD34+ ($P < 0.005$).

Comparison between the presence of extra-articular manifestation in the diseased groups and CD34+,CD38+ is shown in tables(11-12-13) are insignificant($P > 0.05$).

Table (14) shows the extra-articular manifestations in the studied groups.

- 27 (67.5%) patients with no extra-articular manifestation. 15 multipara, 8 nulipara and 4 male RA patients.
- 5 (12.5%) patients complicated with interstitial pulmonary fibrosis. 1 multipara, 1 nulipara and 30 male RA patients.
- 1 (2.5%) multipara complicated with rheumatoid nodule.
- 4 (10%) patients complicated with peripheral neuropathy 1 multipara, 1 nulipara and 2 males.
- 1 (2.5%) male patient complicated with pleuritis.
- 2 multipara RA patients complicated with vasculitis (5%).

Table (15) shows distribution of the studied groups according to deformities. There were 13 RA patients with deformities. Distributed as 8 multipara, 2 nulipara and 3 males.

Table (16) shows distribution of the studied groups according to RF there were 35 patients (87.5%) + ve RF 17 multipara, 8 nulipara and 10 males.

Table (1): Comparison between multipara cases & multipara control as regards age, off spring, CD34 and CD38.

	Group	N	Mean	Std. Deviation	t	p
Age	multipara cases	20	37.85	9.449	2.5	<0.05
	multipara control	20	29.20	7.376		
offspring	multipara cases	20	3.55	1.276	1.5	>0.05
	multipara control	20	2.80	1.549		
CD34	multipara cases	20	46.11	20.218	1.1	>0.05
	multipara control	20	37.62	19.177		
CD38	multipara cases	20	35.64	18.878	1.4	>0.05
	multipara control	20	26.41	13.925		

Fig (17)

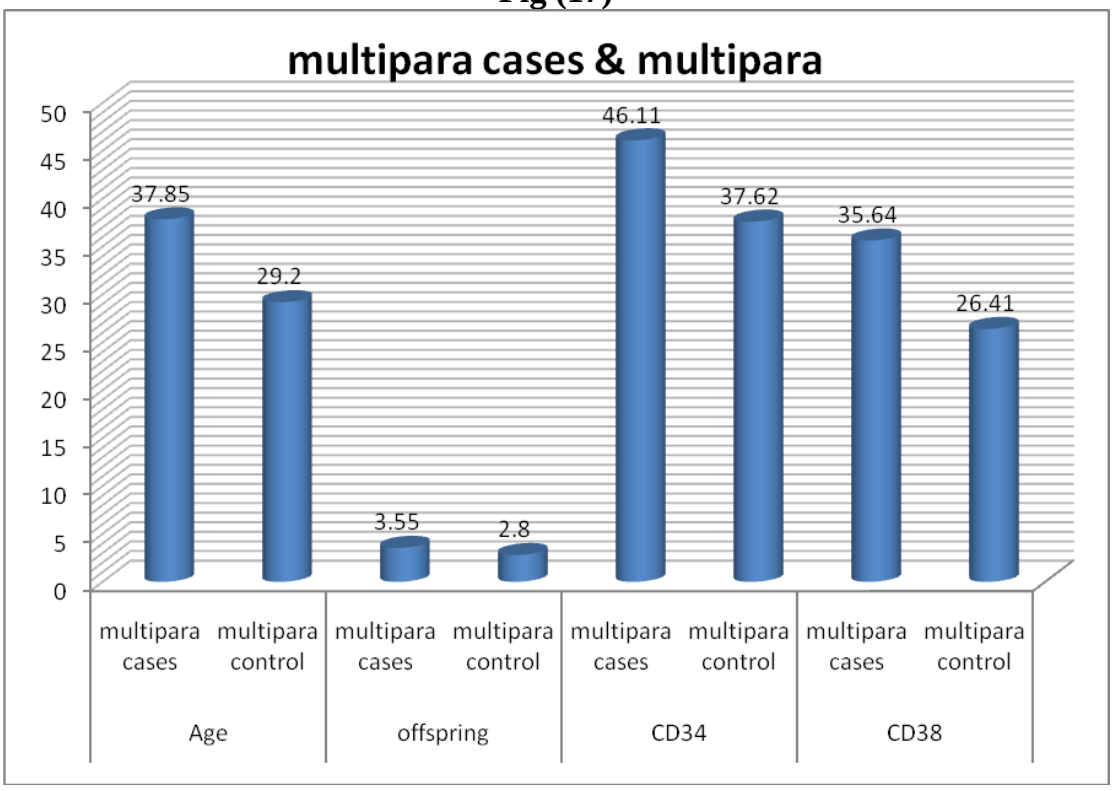

Table (2): Comparison between nullipara cases & nullipara control as regards age, CD34 and CD38

	Group	N	Mean	Std. Deviation	t	p
Age	nullipara cases	10	24.50	3.749	0.2	>0.05
	nullipara control	20	24.20	4.050		
CD34	nullipara cases	10	10.66	3.980	0.8	>0.05
	nullipara control	20	16.08	21.105		
CD38	nullipara cases	10	9.67	3.077	1.8	>0.05
	nullipara control	20	7.10	3.376		

Fig (18)

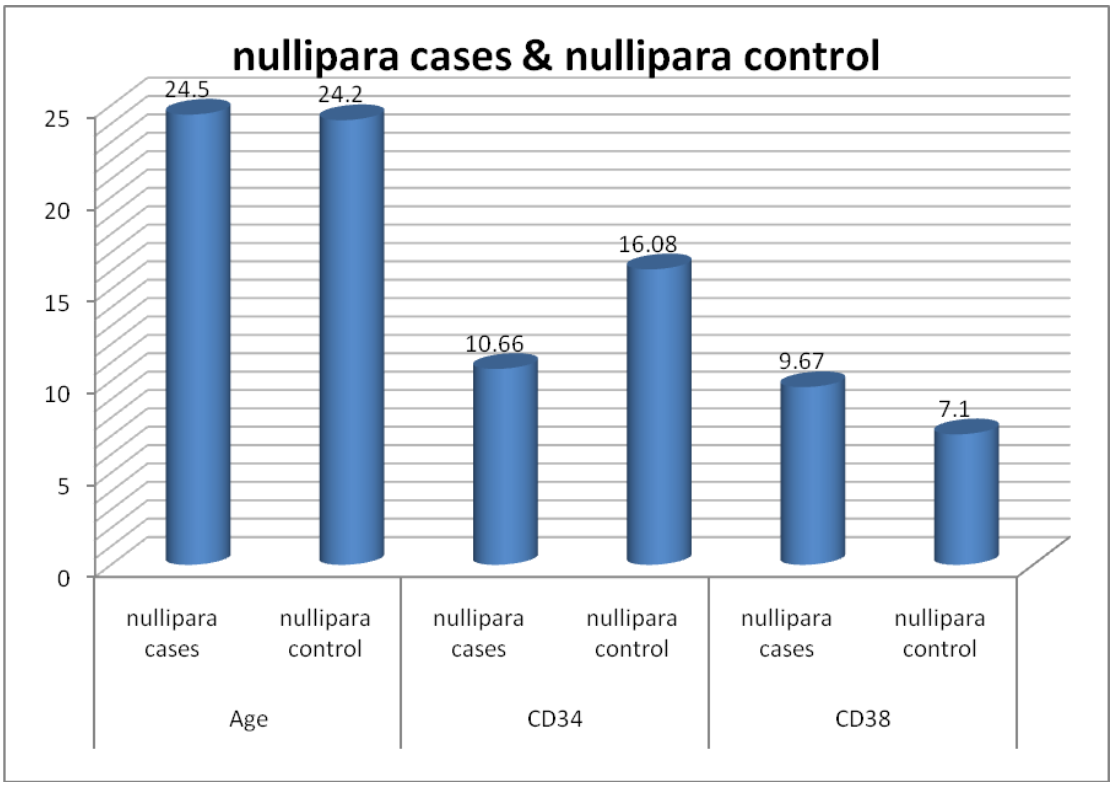

Table (3): Comparison between male cases & male control as regards age, offspring, CD34 and CD38

	group	N	Mean	Std. Deviation	t	p
Age	male cases	10	47.00	8.794	3.3	<0.05
	male control	20	35.80	6.233		
Offspring	male cases	10	3.90	1.449	2.4	<0.05
	male control	20	2.20	1.751		
CD34	male cases	10	14.25	9.557	0.8	>0.05
	male control	20	11.57	3.301		
CD38	male cases	10	14.99	6.894	2.3	<0.05
	male control	20	9.34	3.365		

Fig (19)

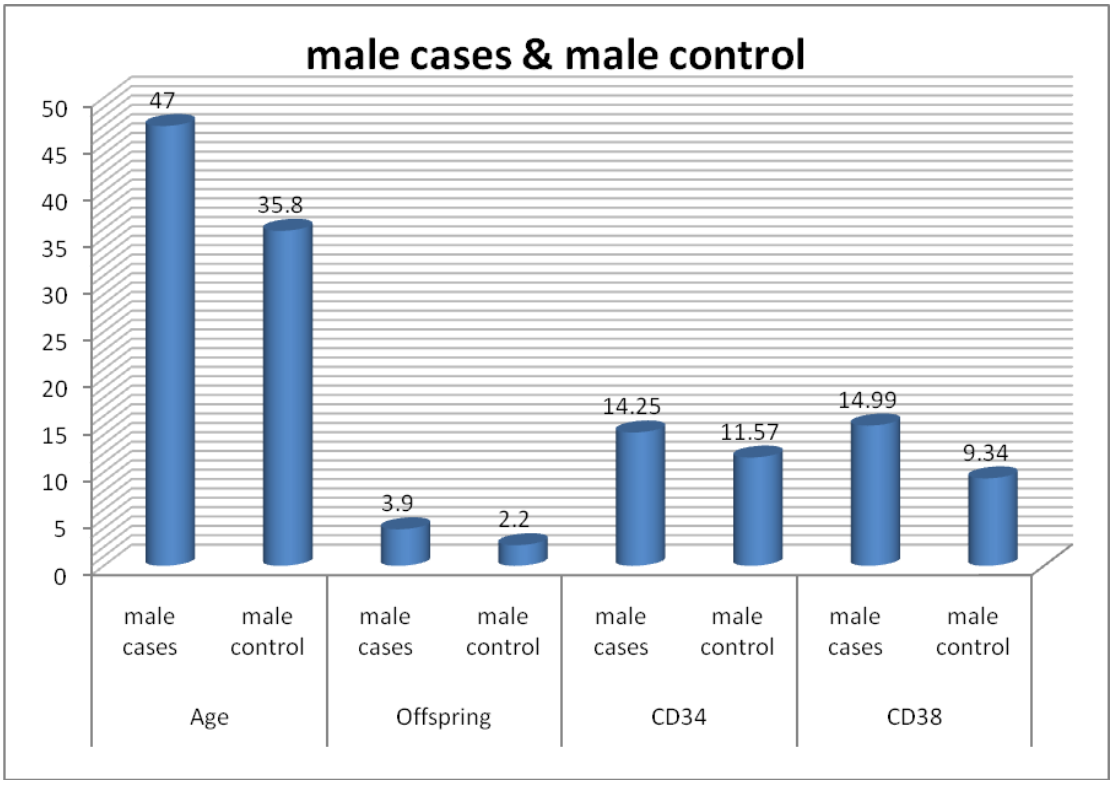

Table (4): Correlation between CD34 & CD38 and different variables in multipara cases:

	CD34			CD38		
	r	**p**	**N**	**r**	**p**	**N**
CD38	0.803	0.000	20	------	------	------
Hb	-0.521	0.042	20	-0.631	0.030	20
ESR	0.199	0.099	20	0.180	0.047	20
offspring	0.911	0.000	20	0.609	0.004	20
MS	0.453	0.0479	20	0.573	0.0391	20
Duration	0.689	0.001	20	0.377	0.102	20
Age	0.821	0.000	20	0.564	0.010	20
Articular index	0.478	0.047	20	0.492	0.048	20
Articular index of hand	0.562	0.039	20	0.509	0.044	20
Rt hand	-0.339	0.144	20	-0.275	0.240	20
Lt hand	-0.404	0.078	20	-0.260	0.268	20

This table shows significant correlation between CD34, CD38 and Hb level, ESR, morning stiffness, disease duration, articular index and articular index of the hands.

Fig (20)

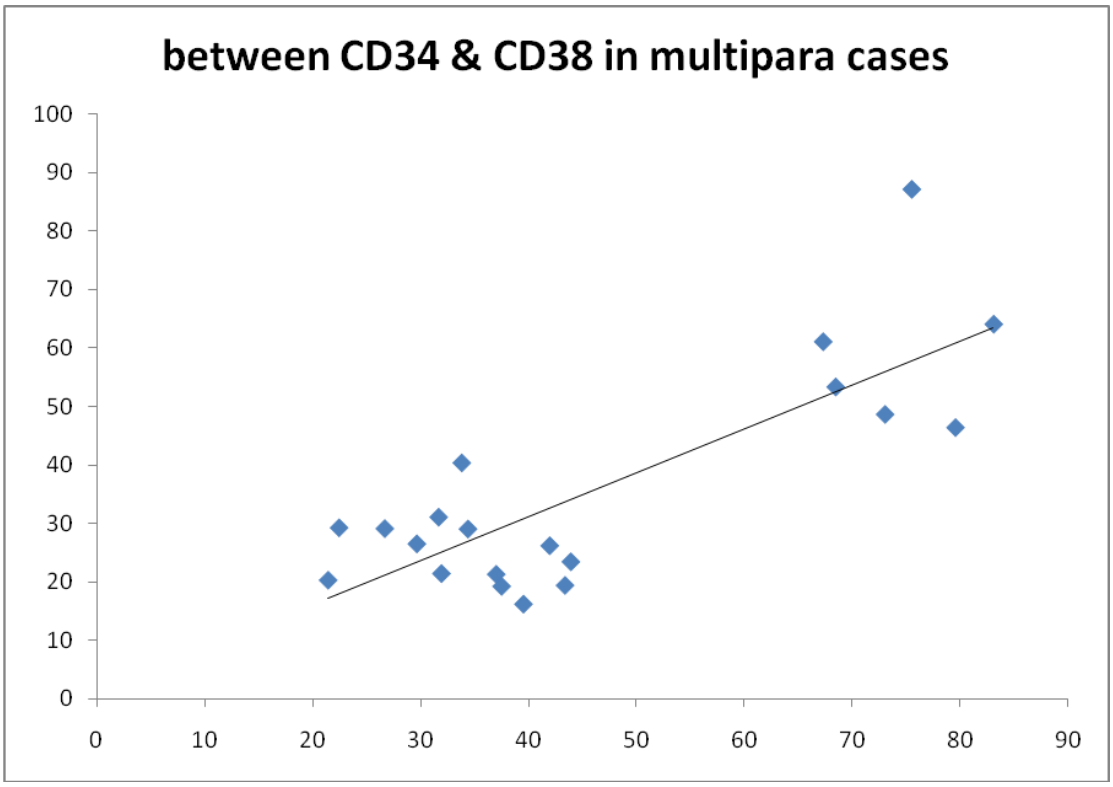
between CD34 & CD38 in multipara cases
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
70
80
90

Fig (21)

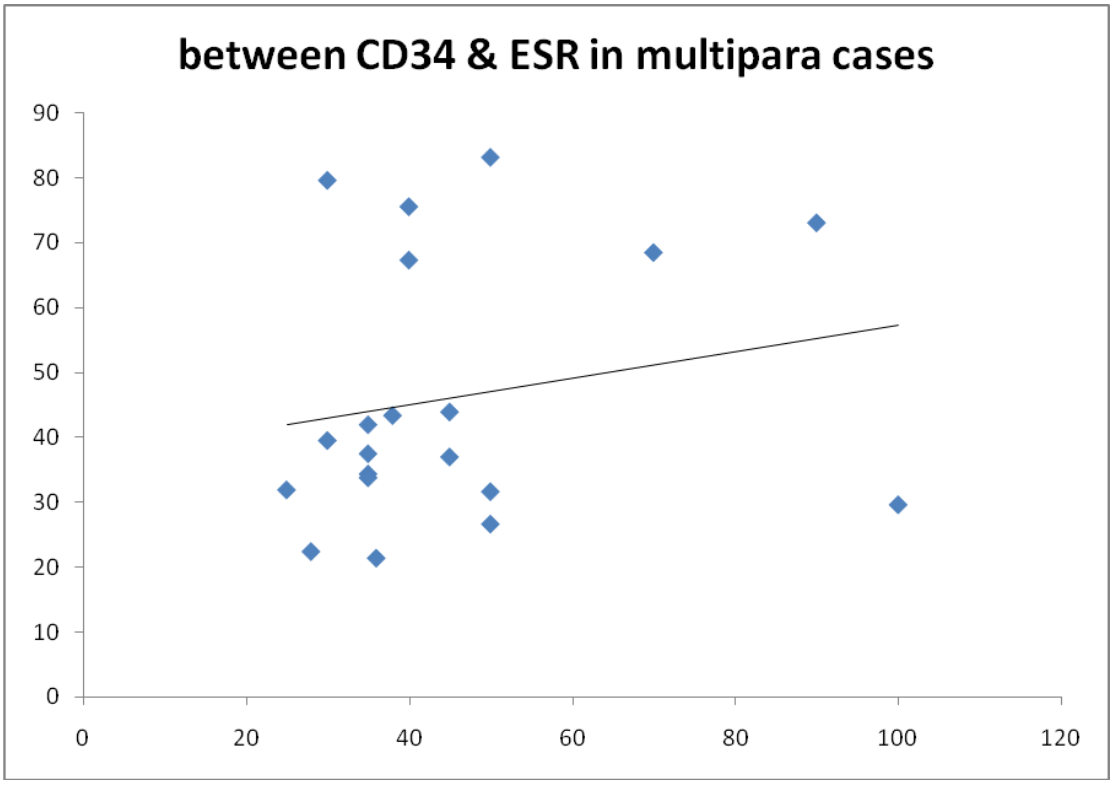
between CD34 & ESR in multipara cases
90
80
70
60
50
40
30
20
10
0
0
20
40
60
80
100
120

Fig (22)

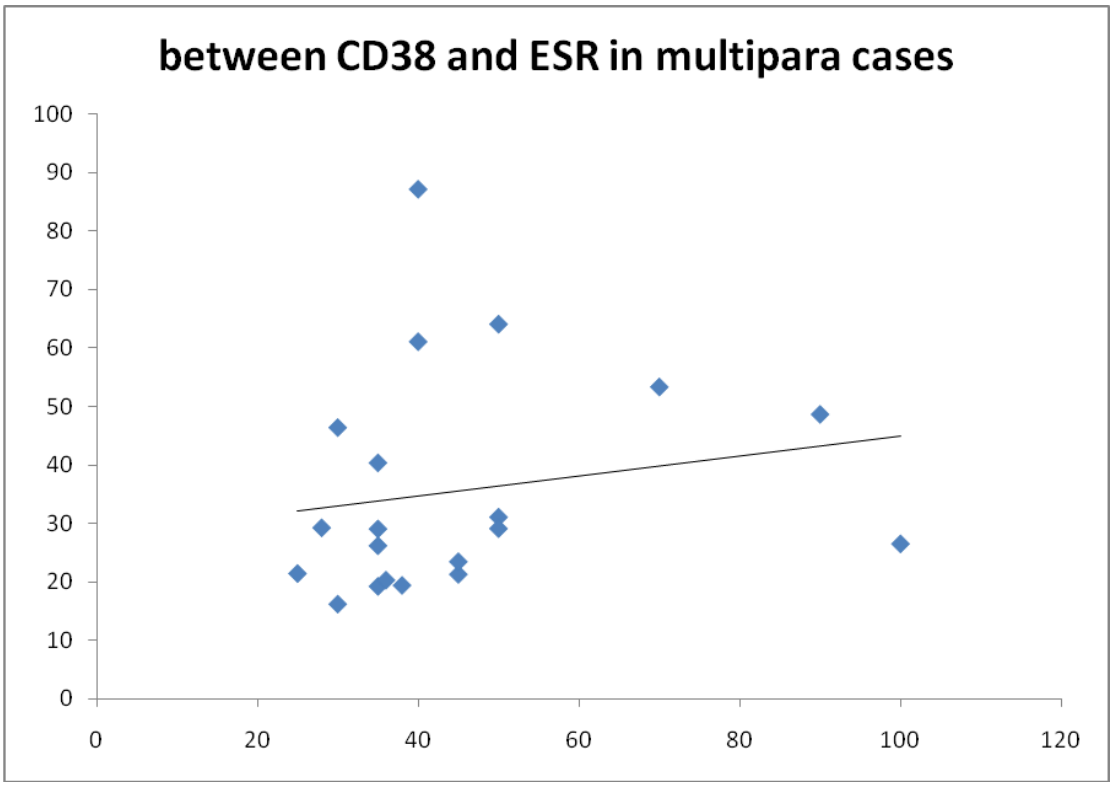
between CD38 and ESR in multipara cases
100
90
80
70
60
50
40
30
20
10
0
0
20
40
60
80
100
120

Fig (23)

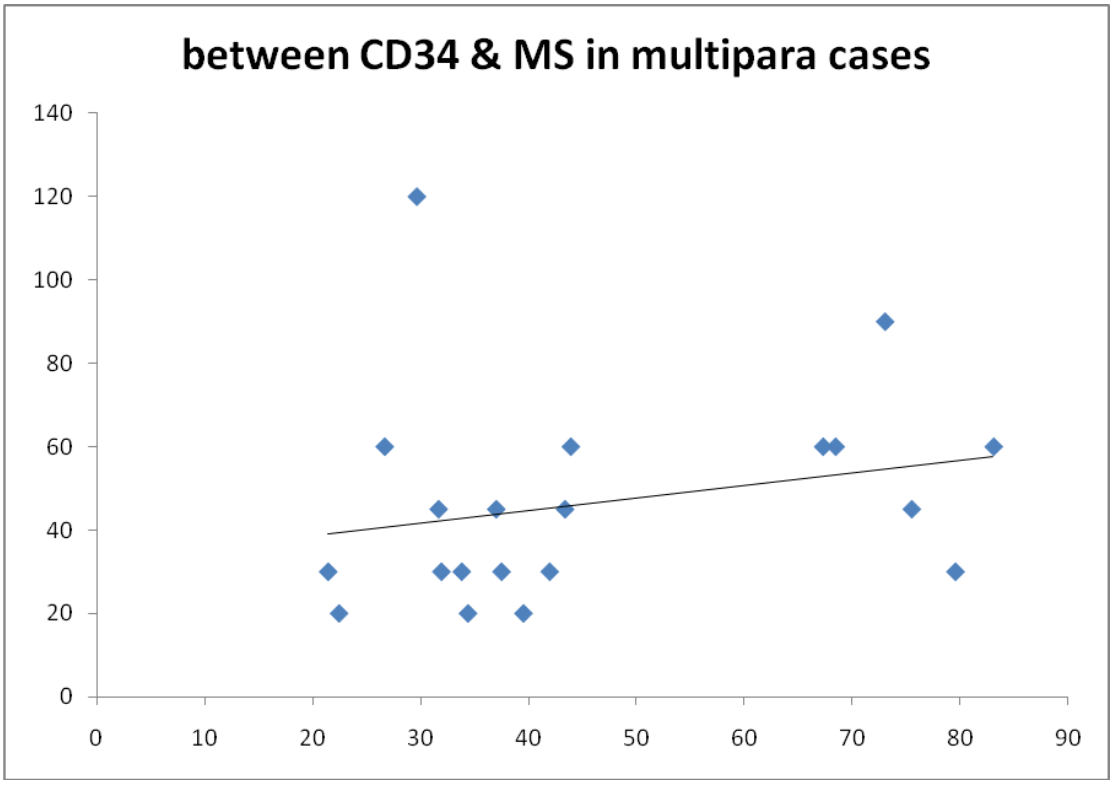
between CD34 & MS in multipara cases
140
120
100
80
60
40
20
0
0
10
20
30
40
50
60
70
80
90

Fig (24)

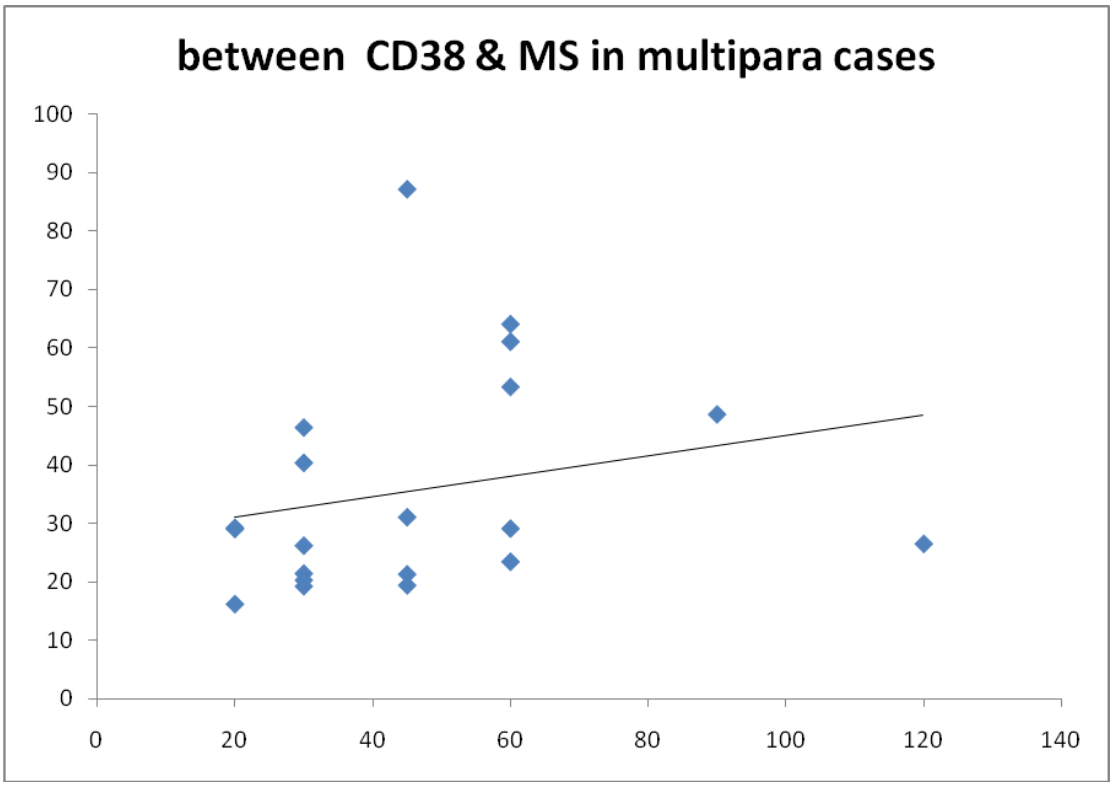
between CD38 & MS in multipara cases
100
90
80
70
60
50
40
30
20
10
0
0
20
40
60
80
100
120
140

Fig (25)

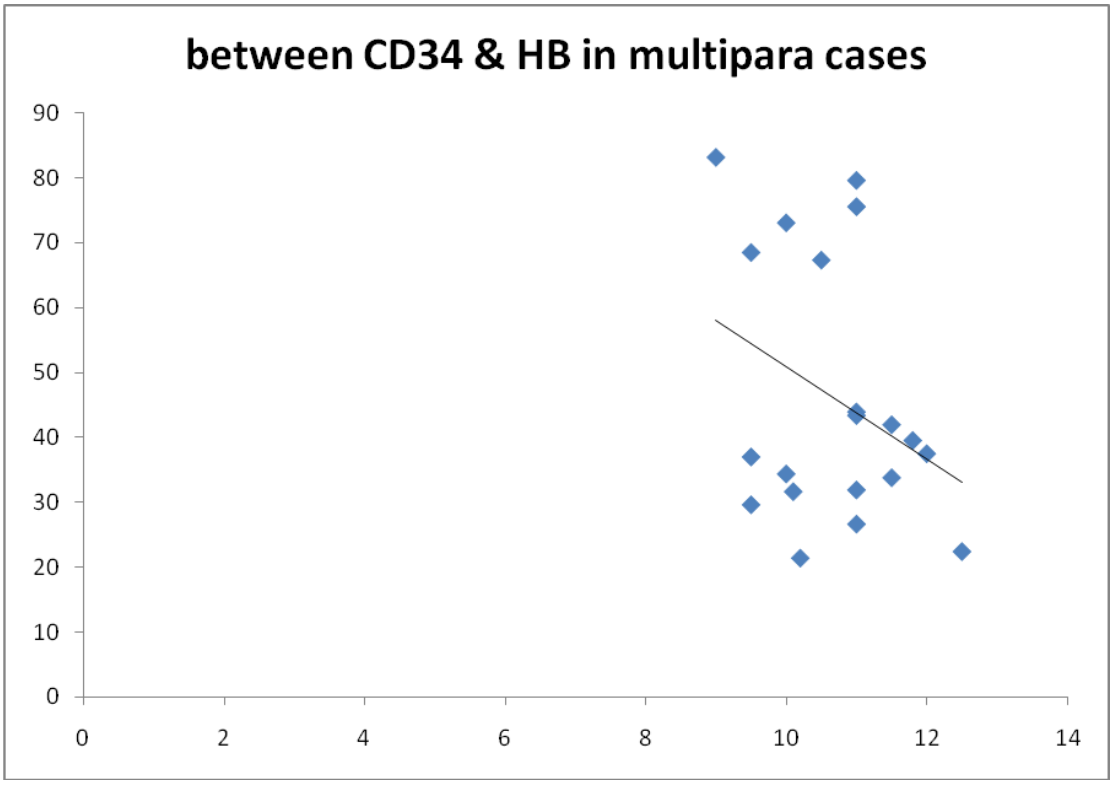
between CD34 & HB in multipara cases
90
80
70
60
50
40
30
20
10
0
0
2
4
6
8
10
12
14

Fig (26)

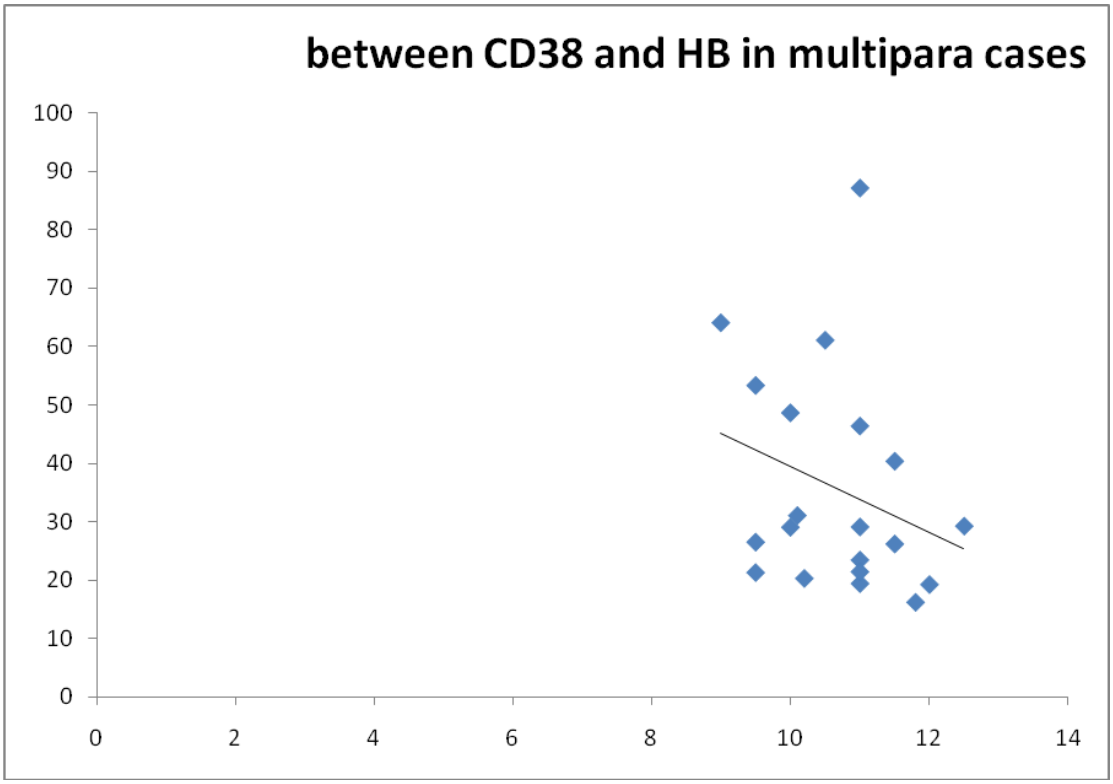
between CD38 and HB in multipara cases
100
90
80
70
60
50
40
30
20
10
0
0
2
4
6
8
10
12
14

Table (5): Correlation between CD34 & CD38 and different variables in nullipara cases

	CD34			CD38		
	r	**p**	**N**	**r**	**p**	**N**
CD38	0.739	0.015	10	------	------	-----
Hb	0.371	0.292	10	0.531	0.114	10
ESR	-0.189	0.600	10	-0.380	0.278	10
MS	-0.273	0.446	10	-0.457	0.184	10
Duration	-0.725	0.118	10	-.706	0.322	10
Age	-0.407	0.243	10	-0.041	0.910	10
Articular index	-0.348	0.324	10	-0.604	0.164	10
Articular index of hand	-0.161	0.656	10	-0.367	0.297	10
Rt hand	0.043	0.906	10	0.340	0.336	10
Lt hand	0.475	0.166	10	0.691	0.127	10

This table shows significant correlation between CD34 and CD38 and insignificant correlation between CD34, CD38 and other variables.

Fig (27)

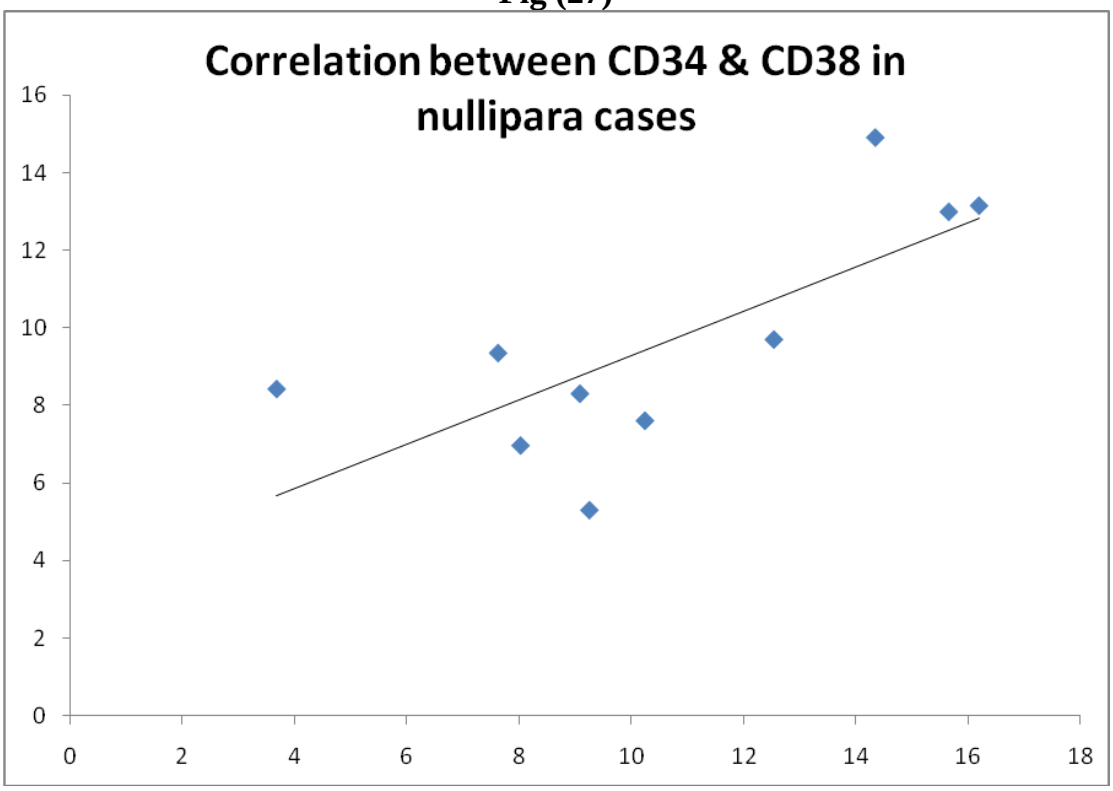

Table (6): Correlation between CD34 & CD38 and different variables in male cases.

	CD34			CD38		
	r	**p**	**N**	**r**	**p**	**N**
CD38	.935	.000	10	----	---------	------
Hb	.126	.729	10	-.121	.739	10
ESR	.064	.861	10	.246	.493	10
offspring	-.303	.395	10	-.286	.424	10
MS	-.381	.277	10	-.169	.640	10
Duration	-.324	.361	10	-.089	.807	10
Age	-.074	.839	10	-.047	.896	10
Articular index	-.128	.725	10	.175	.628	10
Articular index of hand	-.090	.805	10	.144	.691	10
Rt hand	-.064	.861	10	-.258	.473	10
Lt hand	.063	.863	10	-.170	.639	10

This table shows significant correlation between CD34 and CD38 and insignificant correlation between CD34, CD38 and other variables.

Fig (28)

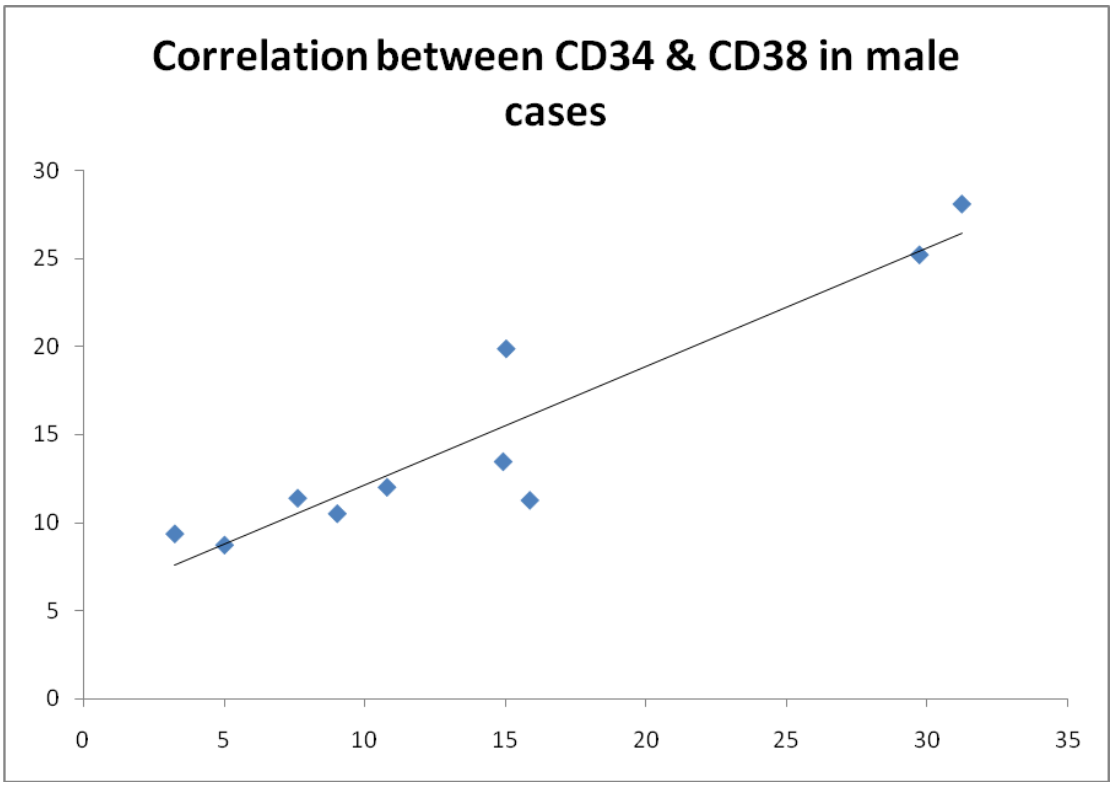
Correlation between CD34 & CD38 in male cases
30
25
20
15
10
5
0
0
5
10
15
20
25
30
35

Table (7): Comparison between diseased groups as regards CD34 and CD38:

	Multipara (n=20)		Nullipara (n=10)		Male (n=10)		f	p
	Mean	±S. D	Mean	±S. D	Mean	±S. D		
CD34	46.11	20.218	10.66	3.980	14.25	9.557	24.1	<0.001
CD38	35.64	18.878	9.67	3.077	14.99	6.894	14.2	<0.001

This table is highly significant in multipara group in comparison to nulipara and male groups as regard CD34, CD38 level.

Fig (29)

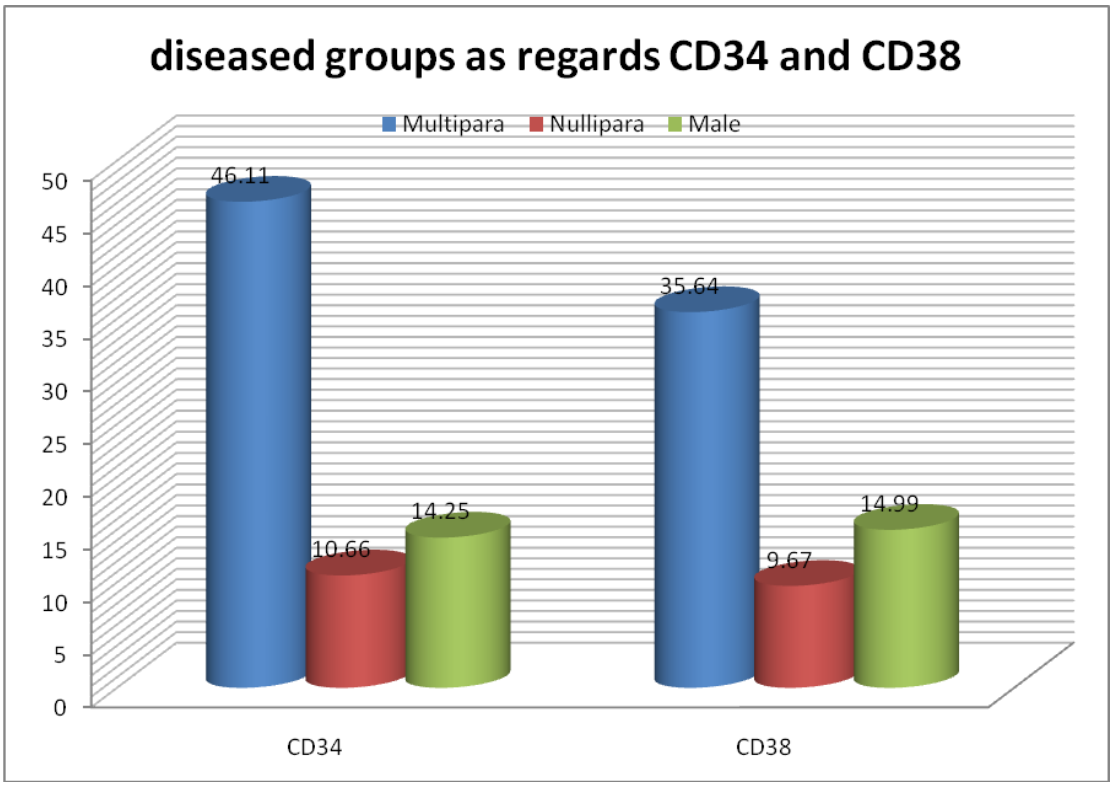

Table (8): Comparison between positive and negative deformity as regards CD34 and CD38 in Multipara:

	Positive (n=8)		Negative (n=12)		Test of significance	p
	Mean	±S. D	Mean	±S. D		
CD34	57.64	20.152	38.43	16.931	2.3	<0.05
CD38	40.56	17.692	32.36	19.673	0.9	>0.05

This table shows significant relation between CD34 and the presence of deformities in multipara RA group.

Fig (30)

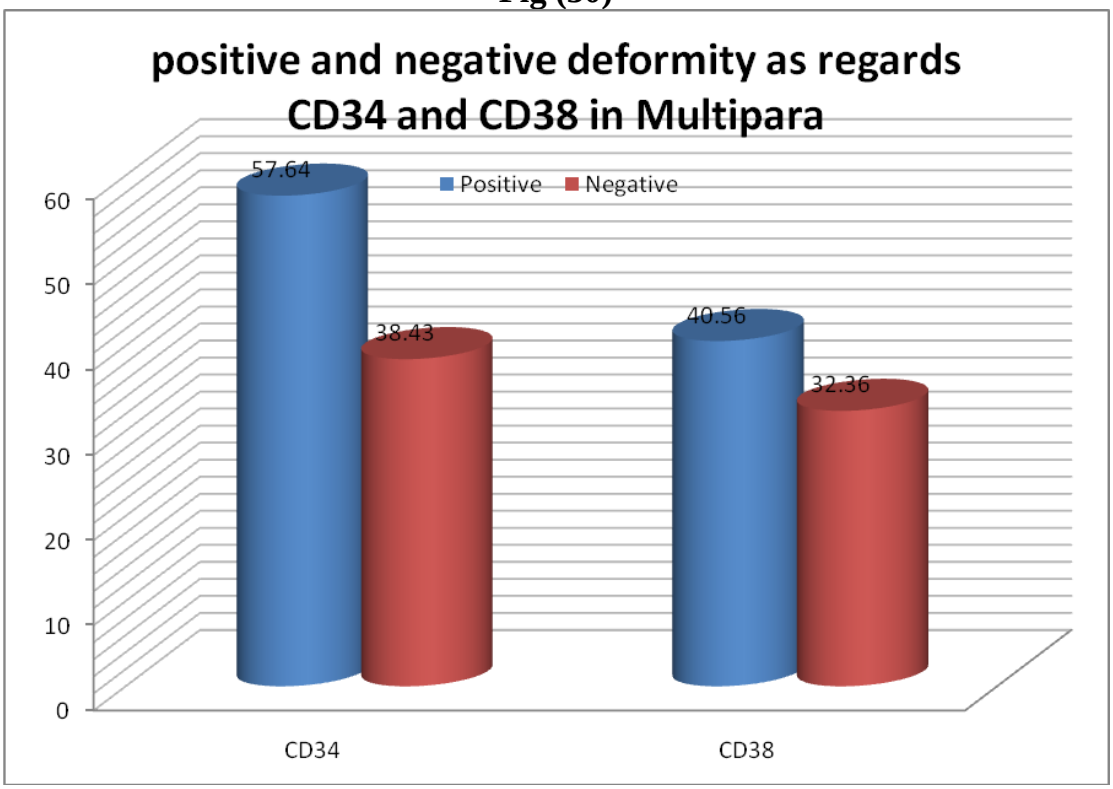

Table (9): Comparison between positive and negative deformity as regards CD34 and CD38 in Nullipara:

	Positive (n=2)		Negative (n=8)		Test of significance	p
	Mean	±S. D	Mean	±S. D		
CD34	6.38	3.825	11.74	3.422	1.9	>0.05
CD38	8.36	085.	10.00	3.399	0.7	>0.05

This table shows insignificant relation between CD34, CD38 and presence of deformities in nulipara RA group.

Fig (31)

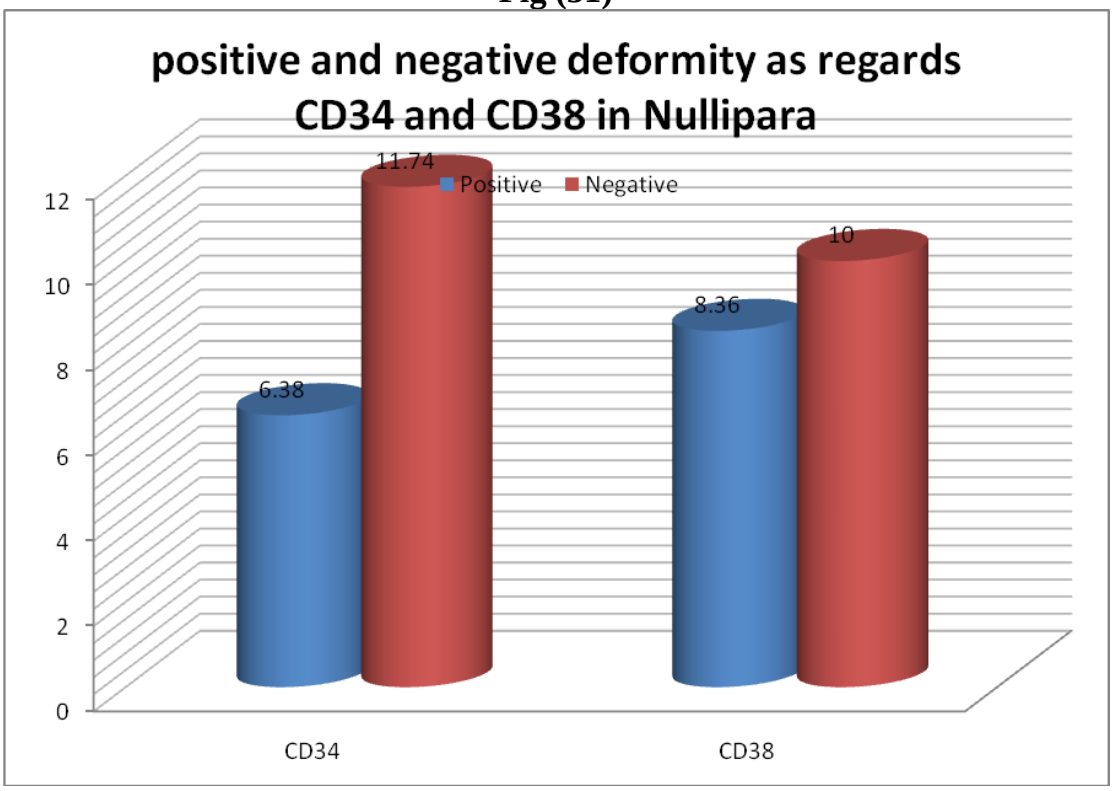

Table (10): Comparison between positive and negative deformity as regards CD34 and CD38 in Male:

	Positive (n=3)		Negative (n=7)		Test of significance	p
	Mean	± S.D	Mean	± S.D		
CD34	13.16	15.680	14.71	7.363	0.2	>0.05
CD38	15.39	10.986	14.81	5.562	0.1	>0.05

This table shows insignificant relation between CD34, CD38 and presence of deformities in male RA group.

Fig (32)

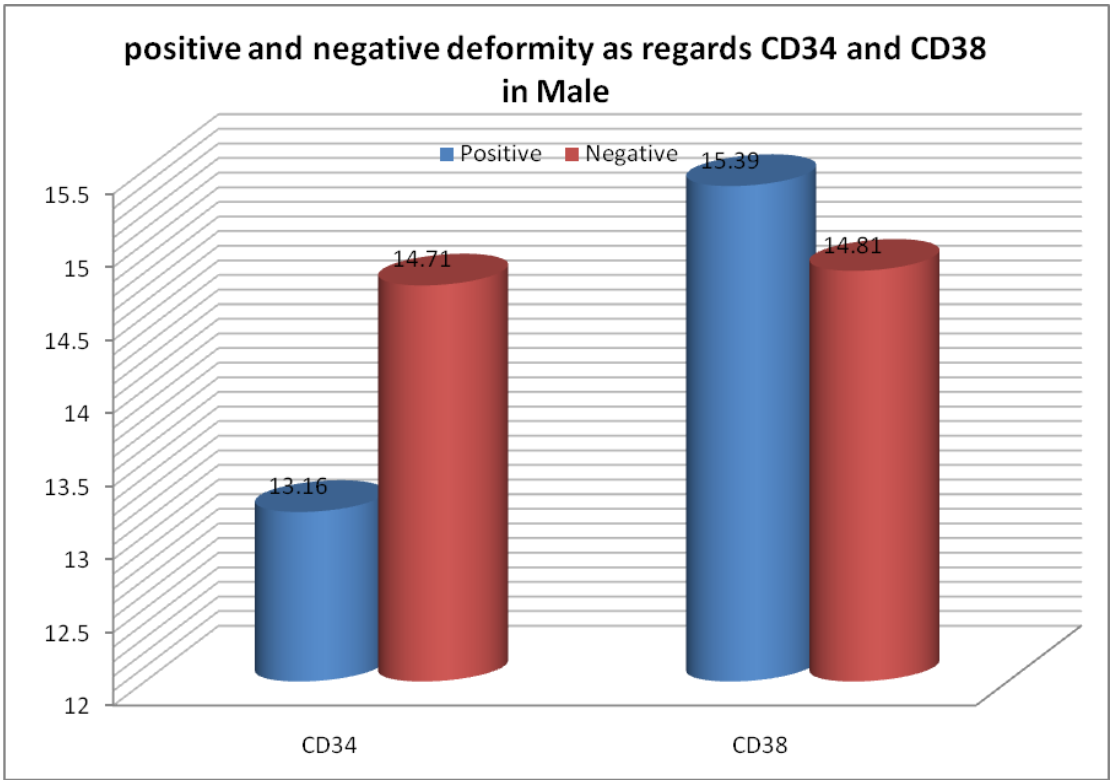

Table (11): Comparison between positive and negative extra-articular manifestations as regards CD34 and CD38 in Multipara:

	Positive (n=5)		Negative (n=15)		Test of significance	p
	Mean	±S. D	Mean	±S. D		
CD34	49.24	20.383	45.07	20.771	0.3	>0.05
CD38	35.76	14.600	35.60	20.561	0.1	>0.05

This table shows insignificant relation between CD34, CD38 and extra-articular manifestation in multipara RA group.

Fig (33)

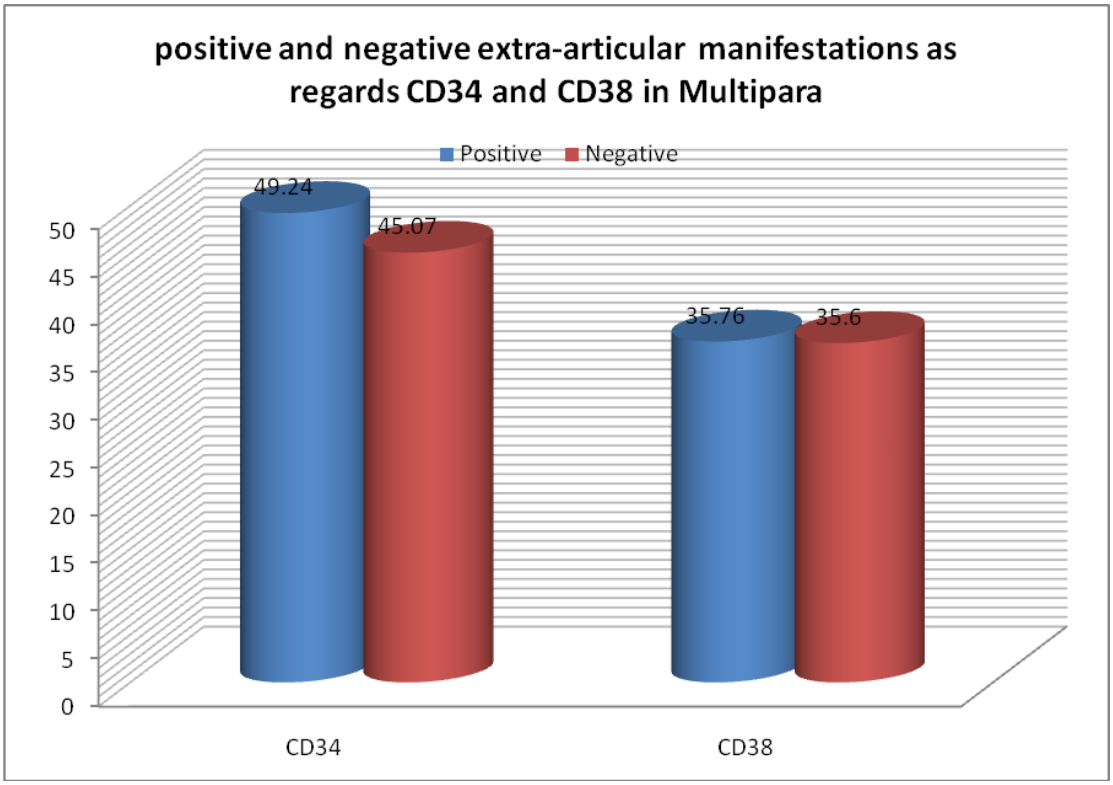

Table (12): Comparison between positive and negative extra-articular manifestations as regards CD34 and CD38 in Nullipara:

	Positive (n=2)		Negative (n=8)		Test of significance	p
	Mean	±S. D	Mean	±S. D		
CD34	6.38	3.825	11.74	3.422	1.9	>0.05
CD38	8.36	0.85.	10.00	3.399	0.7	>0.05

This table shows insignificant relation between CD34, CD38 and extra-articular manifestation in nulipara RA group.

Fig (34)

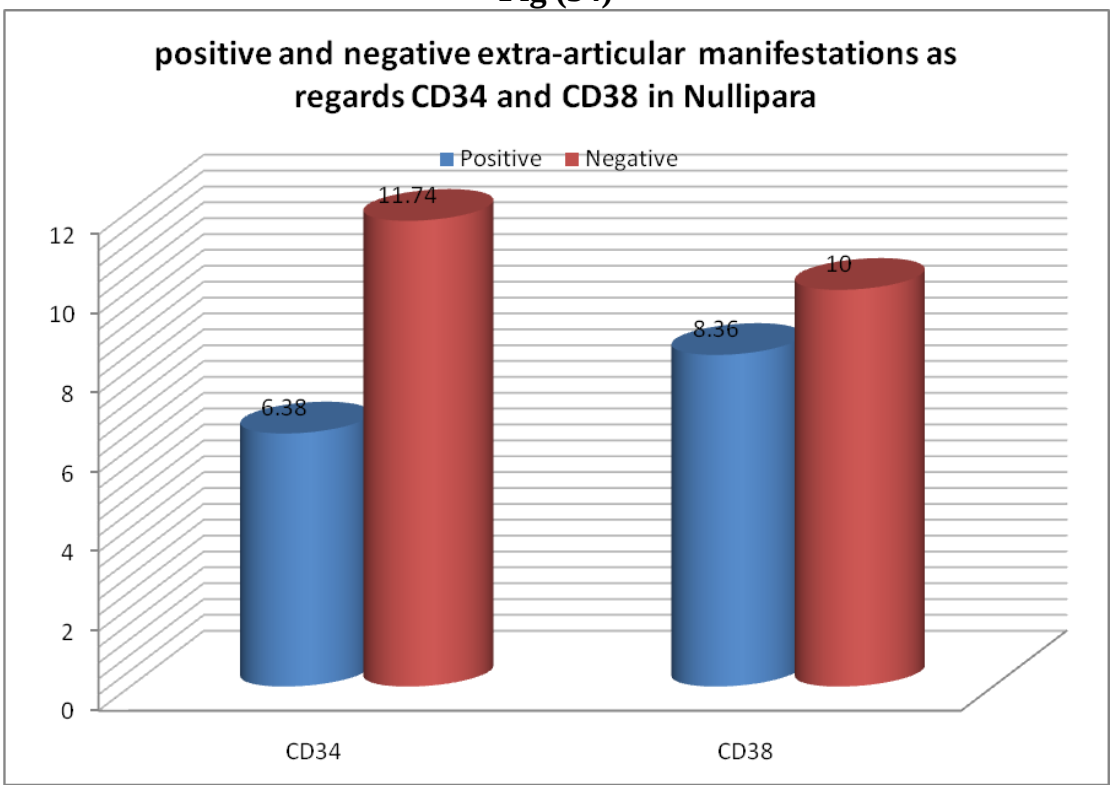

Table (13): Comparison between positive and negative extra-articular manifestations as regards CD34 and CD38 in Male:

	Positive (n=6)		Negative (n=4)		Test of significance	p
	Mean	± S. D	Mean	± S. D		
CD34	15.31	12.433	12.65	3.274	0.5	>0.05
CD38	17.10	8.436	11.81	1.258	1.5	>0.05

This table shows insignificant relation between CD34, CD38 and extra-articular manifestation in male RA group.

Fig (35)

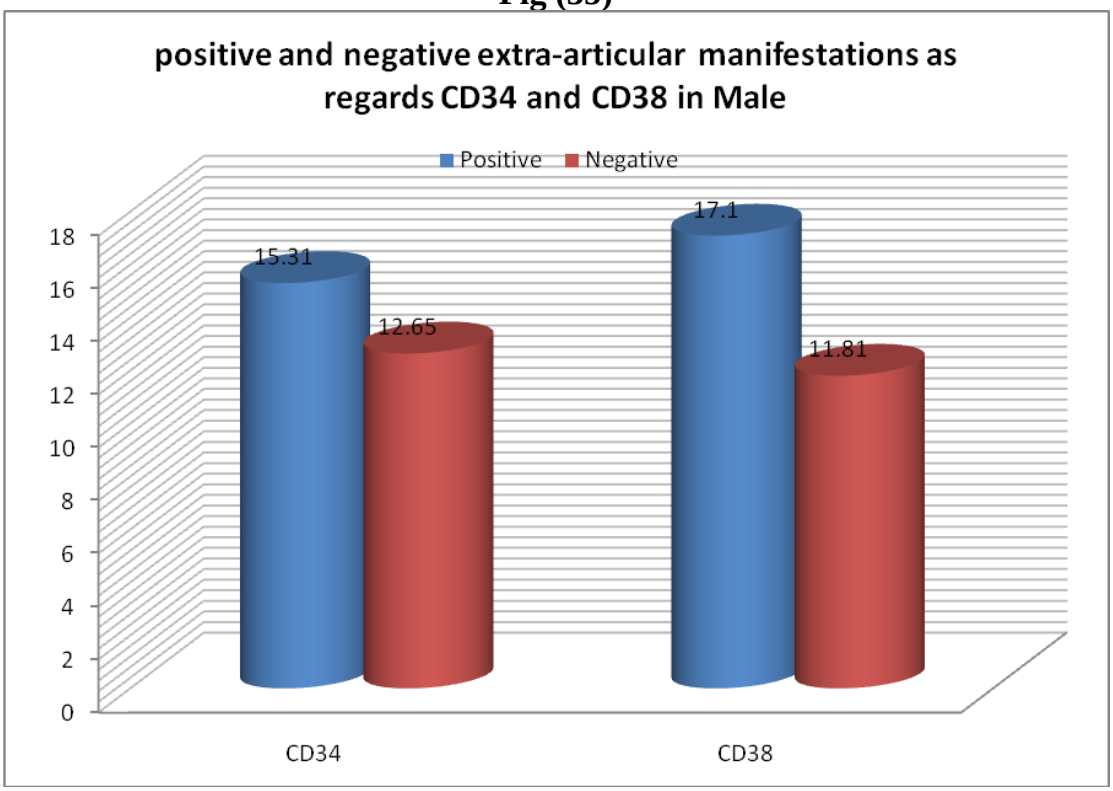

Table (14): Distribution of study group according to extraarticular

		No.	Percent
All studied groups	**IPF**	5	12.5
	Negative	27	67.5
	Nodule	1	2.5
	p.neurop.	4	10
	Pleuritis	1	2.5
	Vasculitis	2	5
	Total	40	100.0
Multipara group	**Negative**	15	75.0
	Neuropathy	1	5.0
	Nodule	1	5.0
	pul. Fibrosis	1	5.0
	Vasculitis	2	10.0
	Total	20	100.0
Nulipara group	**Negative.**	8	80.0
	p.neurop.	1	10.0
	Pluritis	1	10.0
	Total	10	100.0
Male group	**IPF**	3	30.0
	Negative.	4	40.0
	P.neurop.	2	20.0
	Pleuritis	1	10.0
	Total	10	100.0

Table (15): Distribution of study group according to deformities

		No.	Percent
All studied group	**Negative**	27	67.5
	Positive	13	32.5
	Total	40	100.0
Multipara group	**Negative**	12	60.0
	Positive	8	40.0
	Total	20	100.0
Nullipara group	**Negative**	8	80.0
	Positive	2	20.0
	Total	10	100.0
Male group	**Negative**	7	70.0
	Positive	3	30.0
	Total	10	100.0

Table (16): Distribution of study group according to RF

		No.	Percent
All groups	**neg.**	5	12.5
	pos.	35	87.5
	Total	40	100.0
Multipara **group**	**neg.**	3	15.0
	pos.	17	85.0
	Total	20	100.0
Nullipara **group**	**neg.**	2	20.0
	pos.	8	80.0
	Total	10	100.0
Male group	**pos.**	10	100.0

P > 0.05 = non significant

P < 0.05 = significant

Fig. (36): Flowcytometry

Fig. (37): CD34 detection by flowcytometry

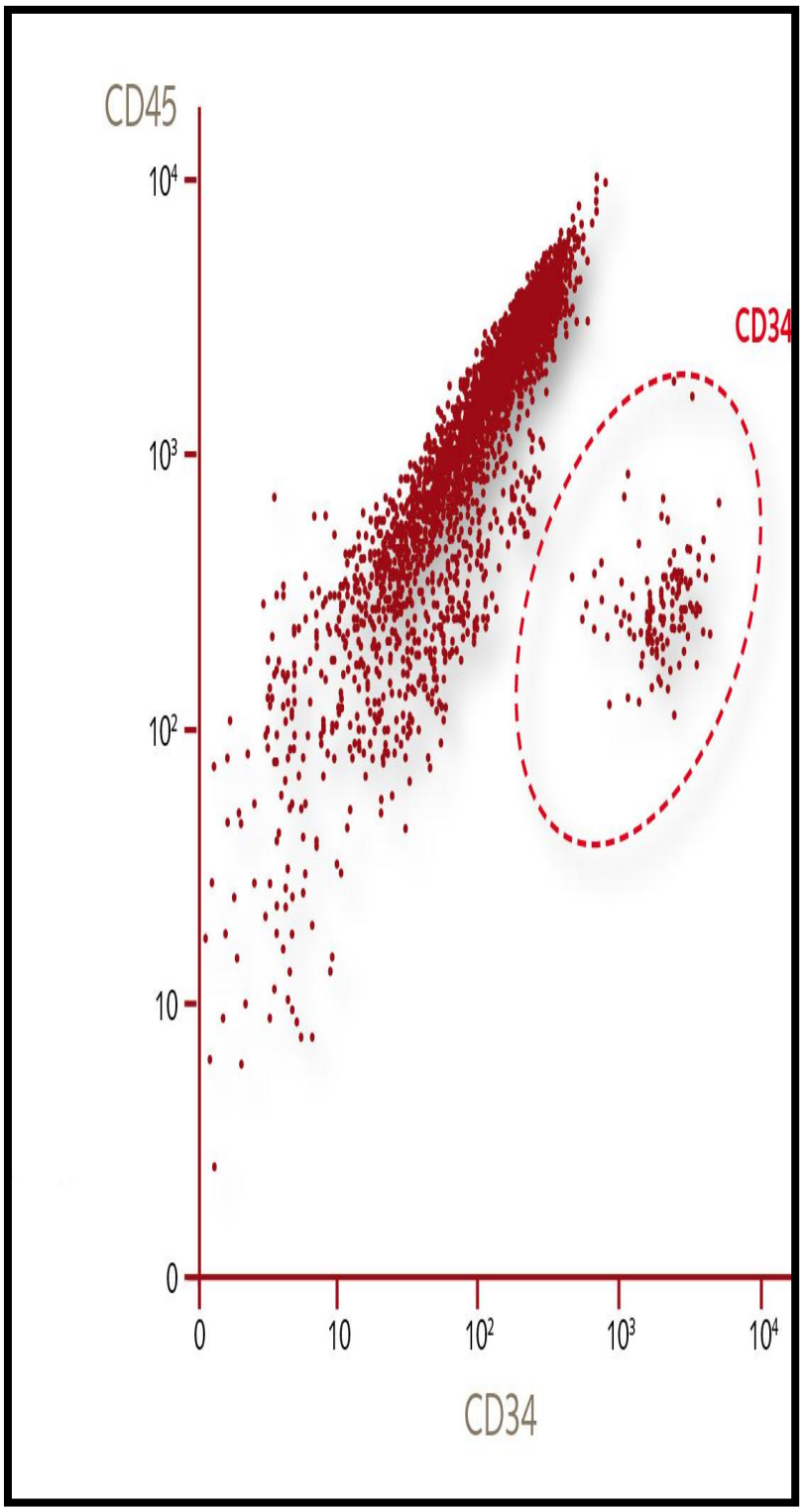

Fig.(38): Detection of CD34 and CD38 using flowcytometry