

RESULTS

52 newborns with jaundice were included in the study with an age ranging from 2 and 10 days with a mean of 6.1 days , with birth weight ranging between 1.350 and 4.850 kg. with a mean of 2087 , 18 infants (35%) were appropriate for gestational age (AGA) , 22 infants (42%) were small for gestational age (SGA), 12 infants (23%) were large for gestational age (LGA) , 32 males (62%) and 20 females (38%), male to female ratio 1.2 : 1 , 30 infants were breast fed (58%) , 17 infants were formula fed (32.5%) , 5 infants were on I.V. fluids (9.5%) , Apgar score at 1 minute was > 7 in 10 infants (19%) and from 5 - 7 in 12 infants (23%) and < 5 in 16 infants (31%) , unknown Apgar score (14.27%) , 37 infants (71%) were delivered normally, 14 (27%) infants by cesarean section , 1 (2%) ventous extraction. Table (1).

None of the infants had undergone exchange transfusion or phototherapy. Septicemia 11 infants (21.2%) , extravasated blood in 1 infant (1.9%) , polycythemia in 2 infants (3.8%) , 2 (3.8%) infants of diabetic mother (IDM), 4 infants (7.7%) SGA , delayed feeding, asphyxia neonatorum in 4 infants (7.7%) , 1 infant (1.9%) with obstructive jaundice , 2 infants (3.8%) breast milk jaundice , 25 infants (48%) with unidentifiable cause of jaundice, table (2), Fig.(1) .

Total serum bilirubin ranged between 4.5 -26.6 with a mean of 13.5 mg% , icterometer reading ranged between grad1 and grad 4 which coincide with 5 - 19.6 mg% , with a mean of 12.68mg%
Table (4)

Distribution of S.B. values are shown in Table (3)).

icterometer reading and S.B and distribution of jaundice on skin zone in all studied cases table (5 and 6).

The coefficient of correlation between icterometer and S.B was 0.65 with the P value < 0.02 .

We analyzed the deviation of icterometer reading and actual S.B and the deviation ranged between (+) 0.11 and (+) 9.6 with the mean of absolute difference 0.13 mg/dl , table (7).

Table (8) shows the accuracy of icterometer in predicting S.B over the range of S.B. measurements obtained and it is most accurate in the levels between 10 - 15 mg/dl. (mean of absolute difference is 0.56) in all studied cases.

We analyzed the accuracy of icterometer in predicting infants with S.B. concentrations more than 12.9 mg/dl and the positive predictive value was 75% and the negative predictive value was 87.5% and sensitivity was 79% and specificity was 85% and prevalence of 37%. fig. (5).

We analyzed our results according to birth weight and classified our cases into three groups :

Group 1 : more than 3.5 kg.(Large for gestational age.)

Group 2 : between 2.5 and 3.5 kg (appropriate for gestational age.)

Group 3 : less than 2.5 kg (Small for gestational age.).

DATA OF INFANTS STUDIES

TOTAL NUMBER 55		NUMBER	PERCENTAGE (%)
SEX MALE : FEMALE RATIO 1.6 : 1	MALE	32	62
	FEMALE	20	38
MODE OF DELIVERY	NORMAL LABOUR	37	71
	CESAREAN SECTION	14	27
	VENTOUS EXTRACTION	1	2
Apgar score at 1 minute	> 7	10	19
	5 - 7	12	23
	< 5	16	31
	Unknown	14	27
Weight in relation to gestational age	appropriate for gestational age (AGA)	18	35
	Small for gestational age (SGA)	22	42
	Large for gestational age (LGA)	12	23
Type of feeding	Breast fed	30	58
	Formula fed	17	32.5
	On I. V. fluids	5	9.5

	Range	Mean
Weight	1.350 - 4.850 gm	2087 gm
Age	2 - 10 days	6.1 days
Gestational age	28 - 44 weeks	37 weeks

- Table (1)

CAUSES OF JAUNDICE IN THE INFANTS STUDIED.

NUMBER OF PATIENTS	%	THE CAUSE OF JAUNDICE
11	21.2	SEPTICEMIA
4	7.7	ASPHYXIA
2	3.8	INFANT OF DIABETIC MOTHER
1	1.9	EXTRAVASATION OF BLOOD
2	3.8	POLYCYTHEMIA
1	1.9	OBSTRUCTIVE JAUNDICE
4	7.7	DELAYED FEEDING
2	3.8	BREAST MILK JAUNDICE
25	48.1	UNIDENTIFIABLE CAUSE OF JAUNDICE.

Table (2)

52	100
----	-----

DISTRIBUTION OF SERUM BILIRUBIN CONCENTRATIONS.

T.S.B (mg%)	FROM 4-11	FROM 10-15	FROM 15-20	FROM 20-27
NO. OF CASES	15	25	9	3
%	29	48	17	6

Table (3)

Causes of Jaundice in studied cases.

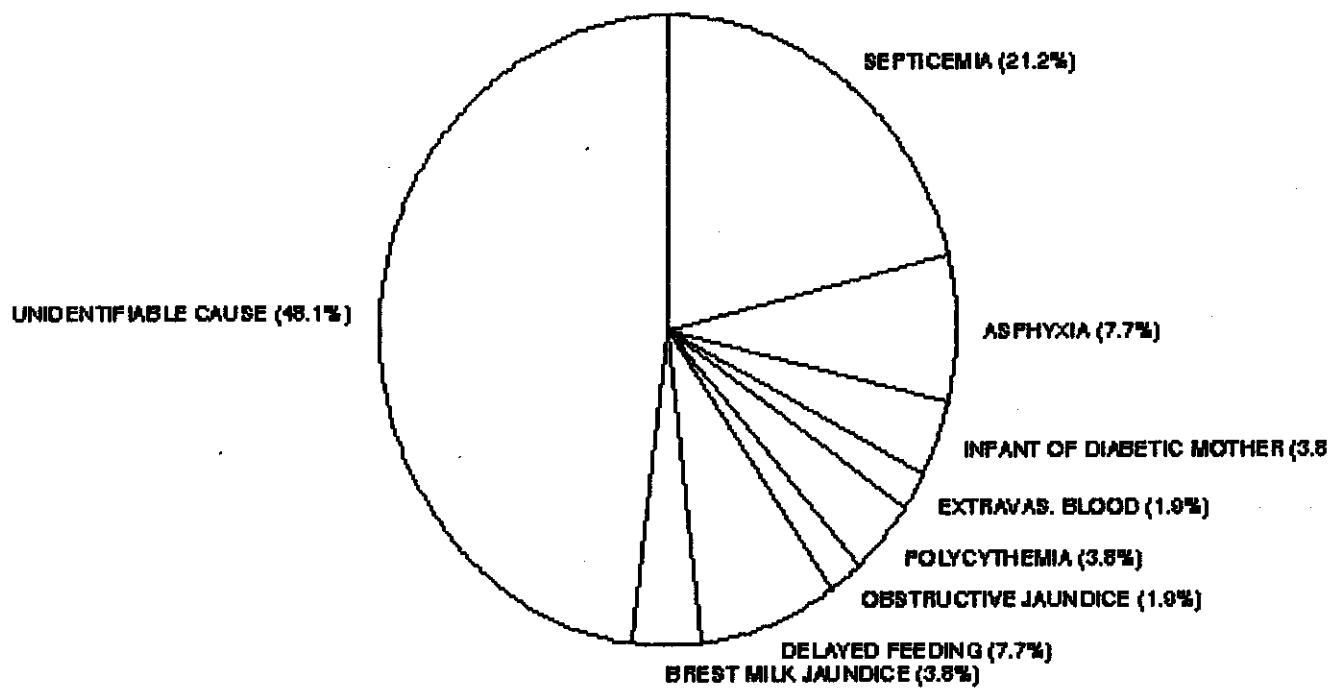


Fig. (1)

CORRELATION BETWEEN ICTEROMETER AND T.S.B
IN ALL STUDIED CASES.

ICTEROMETER	T.S.B	NO. OF CASES
1 (5)	4.5 - 7.7	3
1.5 (6)	6.67 - 10.7	3
2.5 (7.57)	7.0 - 12.9	8
3 (10.3)	14.5	1
3.5 (12.31)	7.8 - 18.0	24
4 (15.73)	15.2 - 19.4	3
4.5 (19.06)	8.4 - 26.5	10

Table (4)

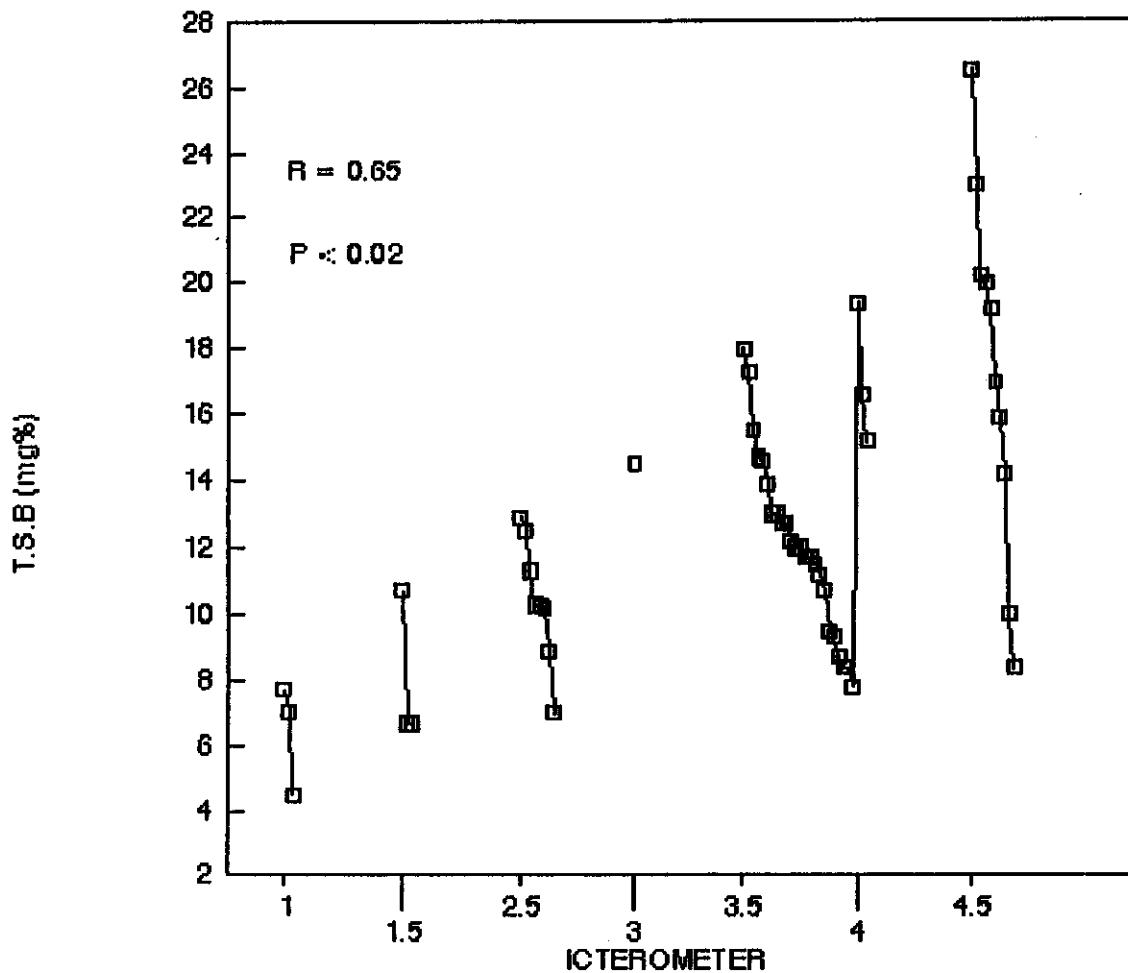
* $R = 0.65$ * $P = < .02$ 

Fig. (2)

**DISTRIBUTION OF DERMAL ICTERUS AND ITS
RELATIONSHIP TO T.S.B IN ALL STUDIED CASES**

SKIN ZONE	T.S.B	NO. OF CASES
1	4.5 - 12.5	5
2	7.0 - 12.7	10
3	7.8 - 17.3	14
4	7.0 - 26.5	20
5	13.9 - 23.0	3

Table (5)

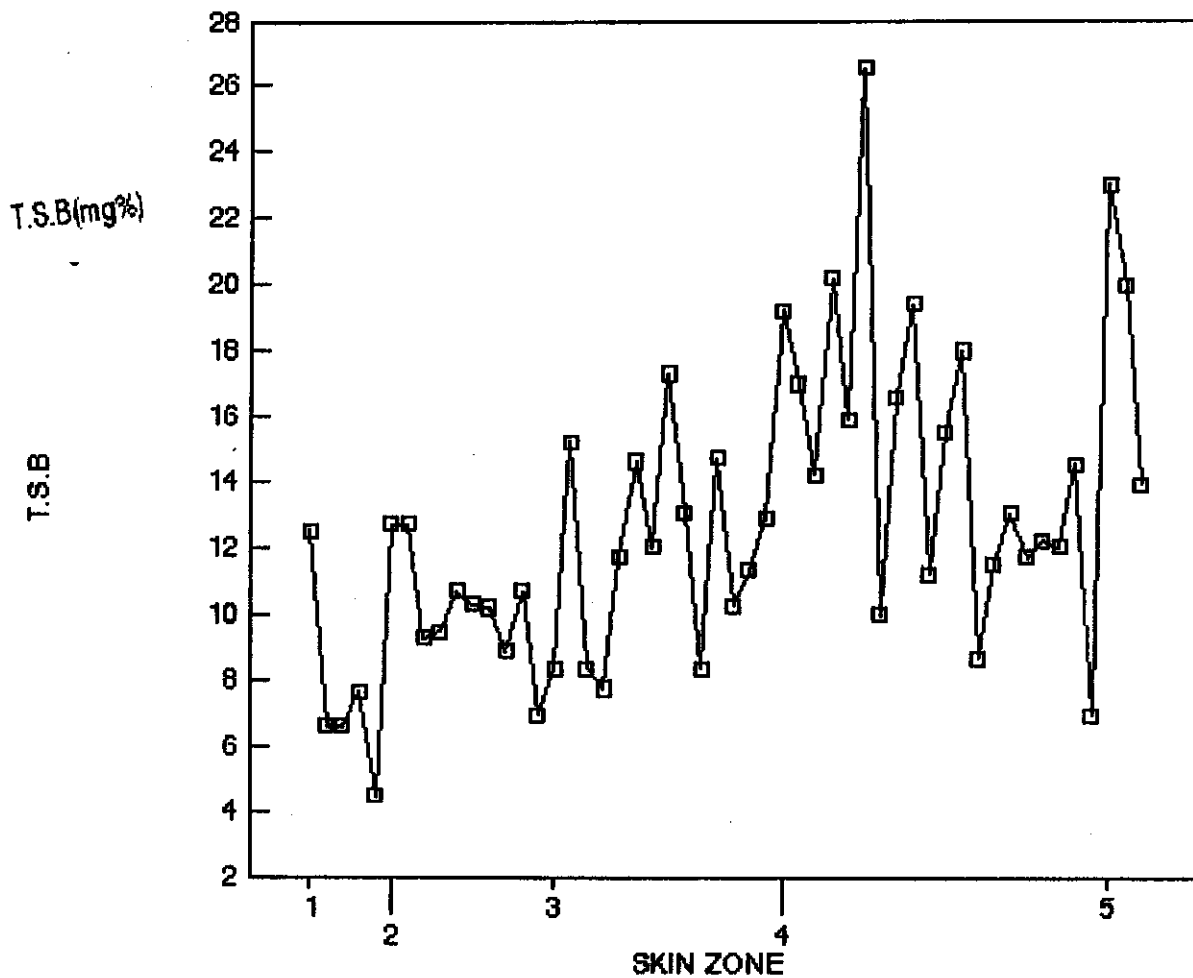


Fig. (3)

RELATIONSHIP BETWEEN SKIN ZONE AND ICTEROMETER
IN ALL STUDIED CASES.

SKIN ZONE	ICTEROMETER	NO OF CASES
1	1 - 2.5	5
2	1 - 3.5	10
3	2.5 - 4.5	14
4	2.5 - 4.5	20
5	3.5 - 4.5	3

Table (6)

RELATIONSHIP BETWEEN SKIN ZONE AND ICTEROMETER IN ALL STUDIED CASES

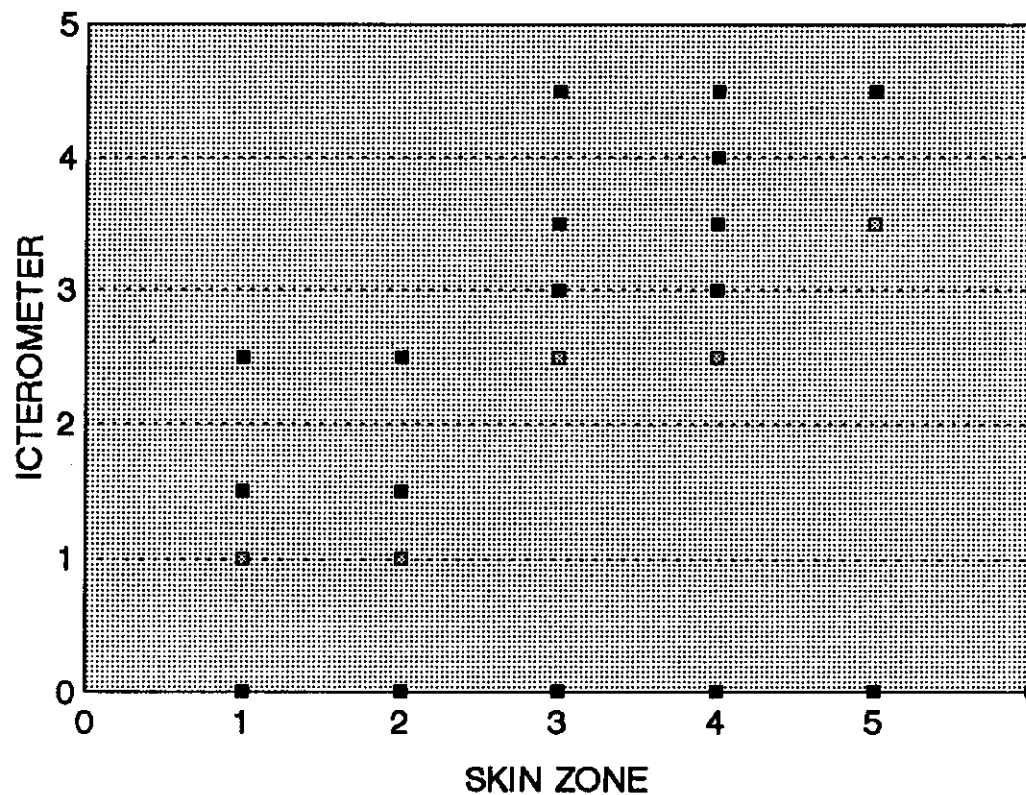


Fig. (4)

**CORRELATION BETWEEN TCB (ICTEROMETER) AND
TOTAL S. BILIRUBIN IN ALL STUDIED CASES.**

NO.	ICTERO METER	T.S.B	DEVIATION DIFFERENC BETWEEN ICTEROMETER & T.S.B	NO.	ICTERO METER	T.S.B	DEVIATION DIFFERENC BETWEEN ICTEROMETER & T.S.B
1	5.00	7.70	-2.70	27	12.31	11.70	0.61
2	5.00	4.50	0.50	28	12.31	11.50	0.81
3	6.00	10.70	-4.70	29	12.31	11.20	1.11
4	6.00	6.67	-0.67	30	12.31	10.70	1.61
5	6.00	6.67	-0.67	31	12.31	9.50	2.81
6	6.60	7.00	-0.40	32	12.31	8.70	3.61
7	7.57	11.30	-3.73	33	12.31	8.40	3.91
8	7.57	8.90	-1.33	34	12.31	7.80	4.51
9	7.57	7.00	0.57	35	12.31	14.50	-2.19
10	7.57	9.30	-1.73	36	12.31	14.70	-2.39
11	7.57	8.40	-0.83	37	15.73	19.40	-3.67
12	10.03	10.30	-0.27	38	15.73	16.60	-0.87
13	10.03	12.90	-2.87	39	15.73	15.20	0.53
14	10.03	10.26	-0.23	40	15.73	15.50	0.23
15	10.03	12.50	-2.47	41	15.73	14.60	1.13
16	10.03	10.20	-0.17	42	15.73	17.30	-1.57
17	12.31	12.70	-0.39	43	15.73	15.00	0.73
18	12.31	18.00	-5.69	44	15.73	14.20	1.53
19	12.31	13.90	-1.59	45	15.73	8.40	7.33
20	12.31	13.00	-0.69	46	19.06	20.00	-0.94
21	12.31	13.00	-0.69	47	19.06	19.20	-0.14
22	12.31	12.70	-0.39	48	19.06	17.00	2.06
23	12.31	12.20	0.11	49	19.06	10.00	9.60
24	12.31	12.00	0.31	50	19.06	20.20	-1.14
25	12.31	12.00	0.31	51	19.06	26.50	-7.44
26	12.31	11.70	0.61	52	19.06	23.00	-3.94

THE DEVIATION OF ICTEROMETER READING AND T.S.B RANGED
BETWEEN (+) 0.11 AND (+) 9.6 WITH THE MEAN OF ABSOLUTE
DIFFERENCE 0.13 mg/dl>

- Table (7)

**ACCURACY OF ICTEROMETER MEASUREMENT OVER RANGE OF
SERUM BILIRUBIN MEASUREMENT OBTAINED.**

No. of Cases	Range of Serum Bilirubin (mg/dl)	Mean of Absolute Difference Between icterometer and T . S .B
15	4.5 – 10	1.6
25	10 – 15	0.56
9	15 – 20	1.12
3	20 – 27	4.17

Table (8)

Accuracy of icterometer in predicting infants with serum bilirubin concentration more than 12.9 mg/dl

		Serum Bilirubin			
		>12.90	<12.90		
ICTEROMET.	>3.5	NO. OF PATIENTS (15) 28.8%	a	b	(5) 9.7%
	< 3.5	(4) 7.6%	c	d	(28) 53.9 %
		19	33		TOTAL NO. 52

a = true positive = 15

b = false positive = 5

c = false negative = 4

d = true negative = 28

Positive predictive value = $a/(a+b) = 15/(15+5) = 75\%$

Negative predictive value = $d/(c+d) = 28/(4+28) = 87.5\%$

sensitivity = $a/(a+c) = 15/(15+4) = 79\%$

specificity = $d/(d+b) = 28/(4+28) = 85\%$

prevalence = $(a+c)/(a+b+c+d) = 15+4 / (15+5+4+28) = 37\%$

Fig. (5)

GROUP 1.

12 newborns with birth weight more than 3.5 kg. with jaundice were studied their icterometer reading rang between (1.5 - 4.5) 6 -19.06 which coinside with serum bilirubin between 6.67 to 15.9 with mean of absolute difference 1.21 .Table (9).

The relation between skin zone , ictrometer and serum bilirubin are shown in table (10)

The coefficient of correlation between icterometer and S.B. with 0.8 and P valu < 0.02 . fig (6).

The relation between distribution of jaundice in skin zones and TSB are shown in Table (11) fig.(7) .

Correlation between icterometer reading and distribution of jaundice in skin zones are shown in fig. (8).

**RELATION BETWEEN SKIN ZONE , ICTEROMETER
AND T.S.B IN INFANTS WEIGHTED MORE THAN 3.5 kg**

NO.	SKIN ZONE	ICTEROMETER	T.S.B
1	1	1.5 (6)	6.67
2	1	1.5 (6)	6.67
3	2	2.5 (7.57)	10.3
4	3	3.5 (12.31)	17.3
11	4	3.5 (12.31)	15.5
5	3	3.5 (12.31)	13
12	4	3.5 (12.31)	11.2
7	4	4 (15.73)	19.4
9	4	4 (15.73)	16.6
6	4	4.5 (19.06)	20.2
8	4	4.5 (19.06)	19.2
10	4	4.5 (19.06)	15.9

Table (10)

SKIN ZONE	T.S.B	NO. OF CASES
1	6.67	2
2	10.3	1
3	13 – 17.3	2
4	11.2 – 20.2	7

Table (11)

ICTEROMETER	T.S.B	NO. OF CASES	R
1.5	6.67	2	0.8
2.5	10.3	1	0.8
3.5	11.2 – 17.3	4	0.8
4	16.6 – 19.4	2	0.8
4.5	15.9 – 20.2	3	0.8

Mean of absolute difference is 1.21

Table (9)

CORRELATION BETWEEN ICTEROMETER AND T.S.B

IN INFANTS MORE THAN 35 kg (Group 1.)

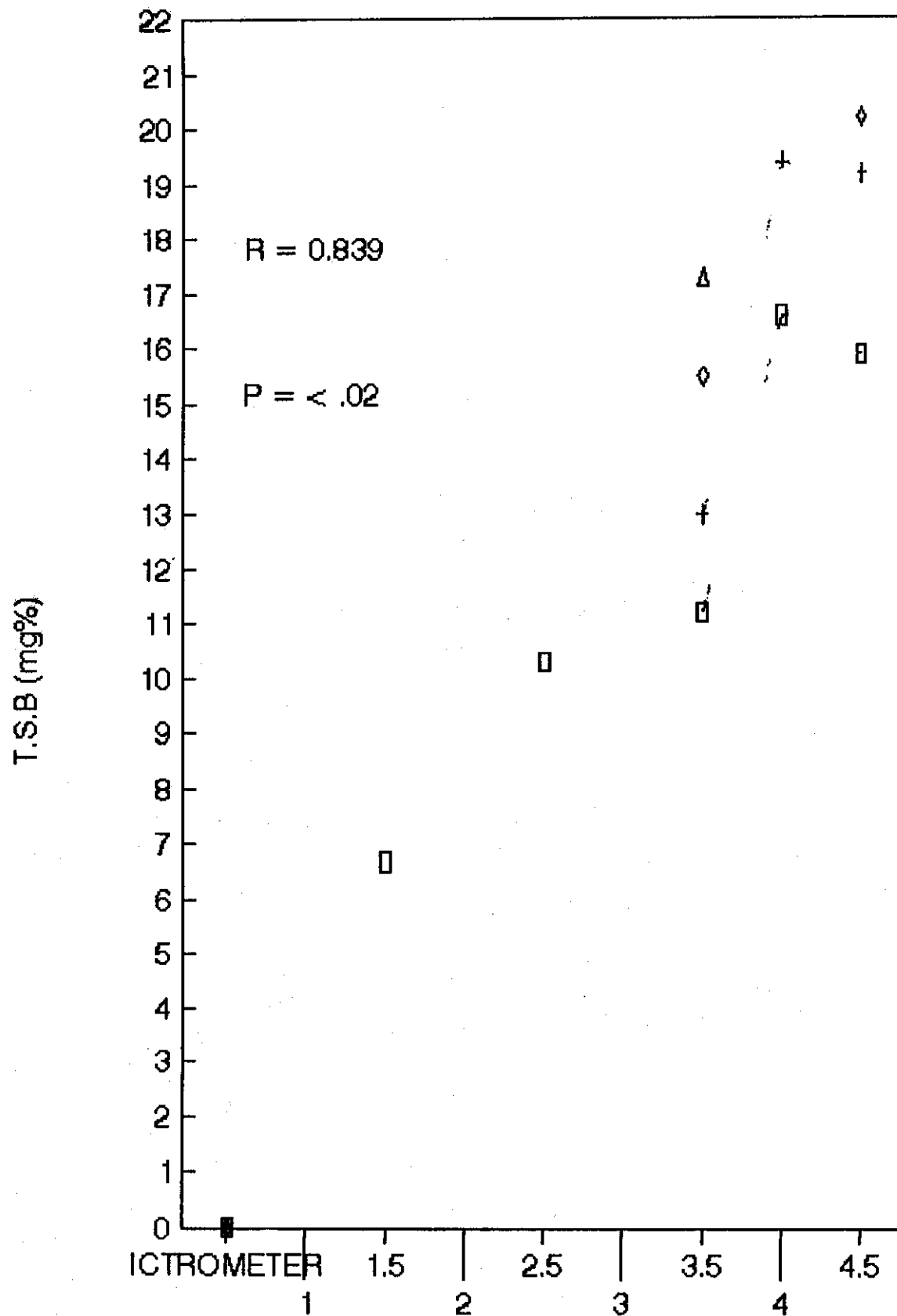


Fig. (6)

RELATIONSHIP BETWEEN SKIN ZONE AND I.S.B (mg%) IN IFANIS MOHE THAN 3.500 kg. (GROUP I)

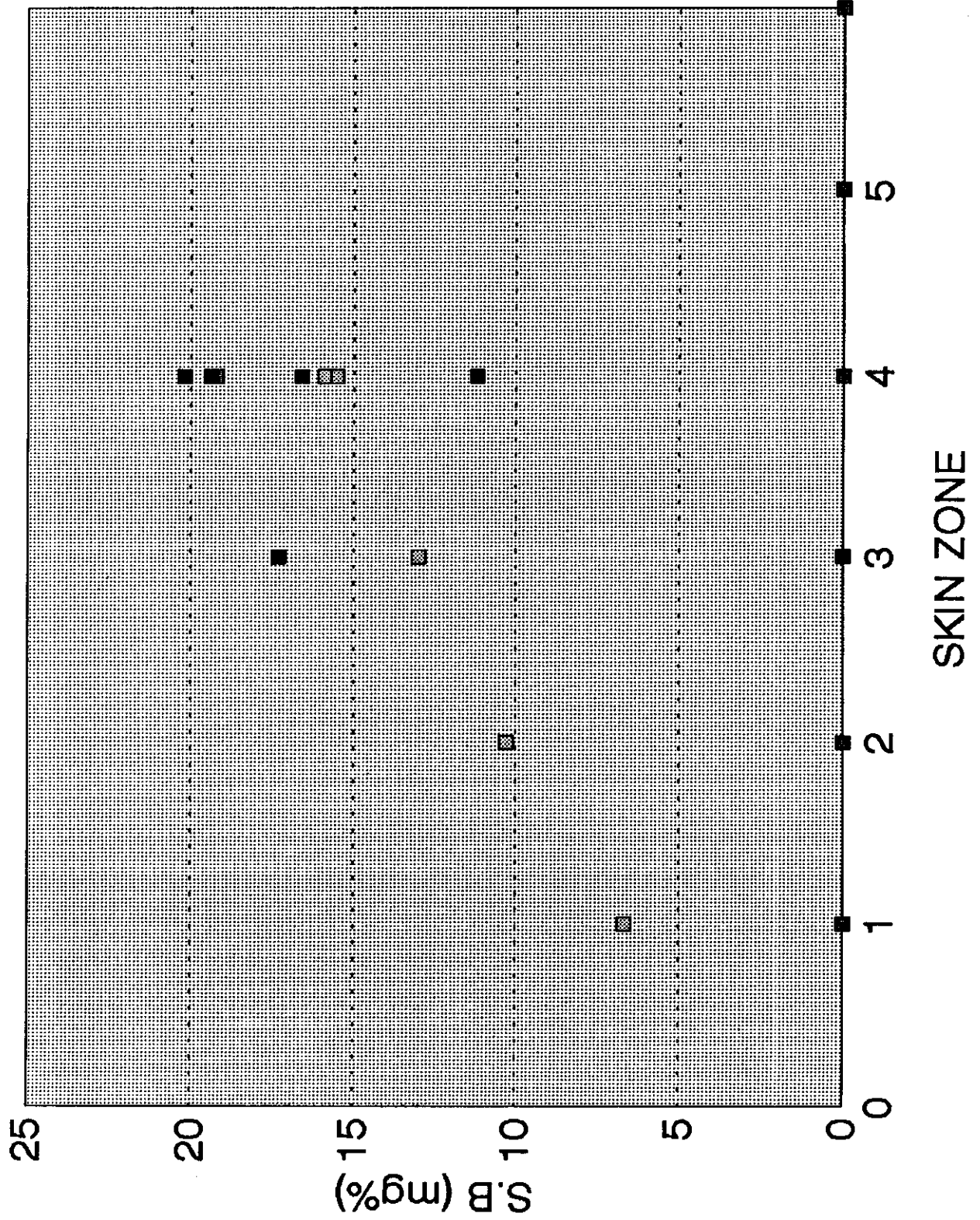


Fig. (7)

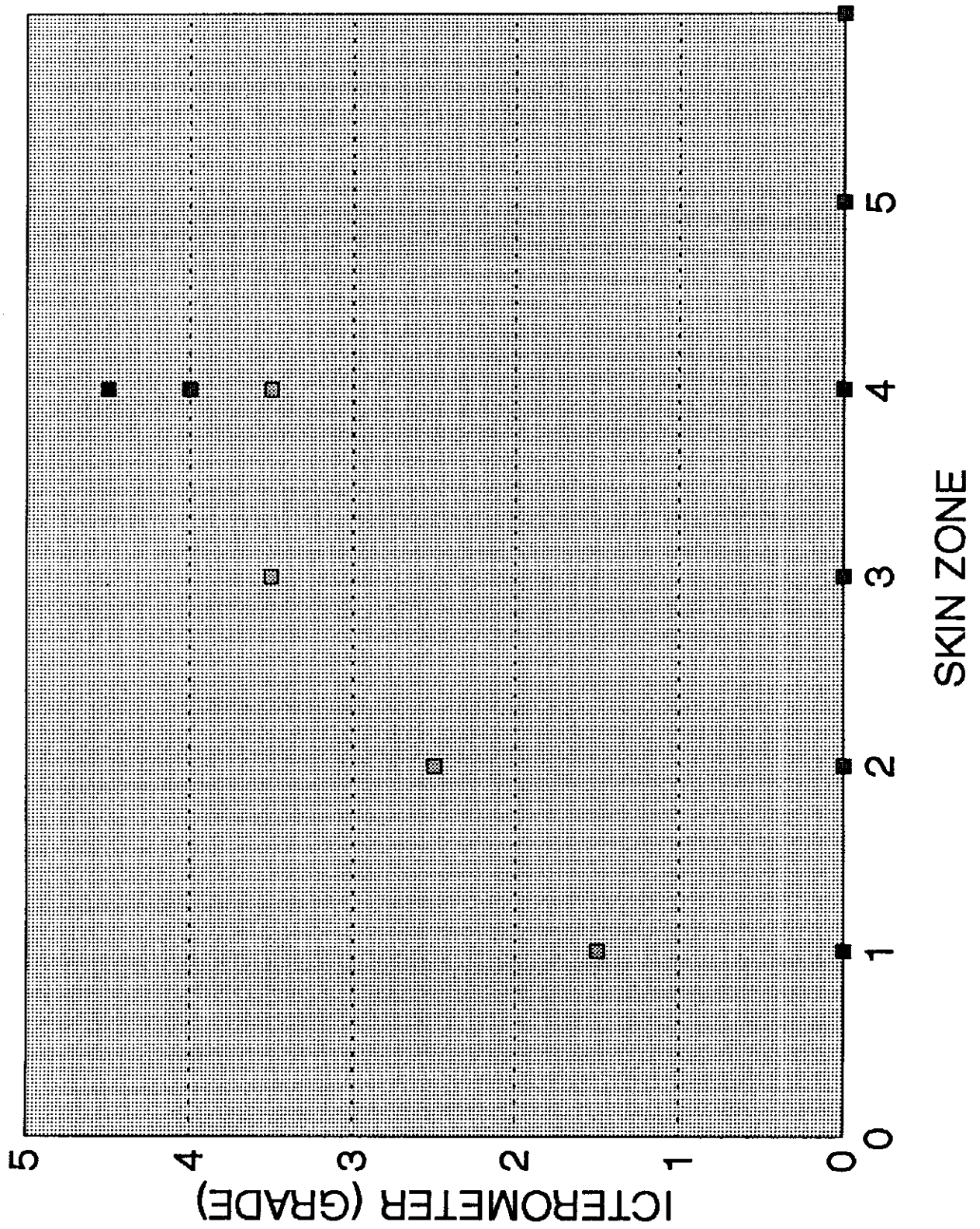


Fig. (8)

GROUP 2.

18 newborns with jaundice their weight ranged between 2.5 and 3.5 (appropriate for gestational) were included in our study there icterometer reading ranged between 1 - 4.5 (5 - 19.06 mg%) which correlated with S.B 7 to 26.5 mg% with mean of absolute difference was 0.86 (the most accuracy) . table (14) fig. (9)

The correlation coefficient was 0.407 and P value < 0.05

Correlation between icterometer reading and distribution of jaundice and skin zones are shown in fig.(11), Fig.(10) and table (12 and 13) .

RELATION BETWEEN SKIN ZONE, ICTEROMETER AND S. BILIRUBIN

IN INFANTS WEICHTED BETWEEN 2.500 AND 3.500 kg (**GROUP II**)

SKIN ZONE	ICTEROMETER (mg%)	S. BILIRUBIN (mg%)
1	2.50 (7.57)	12.50
1	1.00 (5)	7.70
2	3.50 (12.31)	12.70
2	3.50 (12.31)	12.70
2	2.50 (7.57)	10.20
2	1.00 (5)	7.00
3	3.50 (12.31)	14.70
3	3.50 (12.31)	11.70
3	2.50 (7.57)	10.26
4	4.50 (19.06)	26.50
4	3.00 10.03	14.50
4	4.50 (19.06)	14.20
4	3.50 (12.31)	11.50
4	4.50 (19.06)	10.00
4	3.50 (12.31)	8.70
4	2.50 (7.57)	7.00
5	4.50 (19.06)	23.00
5	4.50 (19.06)	20.00

Table (12)

SKIN ZONE	T.S.B (mg%)	NO. OF CASES
1	7.7 - 12.5	2
2	7 - 12.7	4
3	10.26 - 14.7	3
4	8.70 - 26.5	6
5	14.2 - 20	2

Table (13)

ICTEROMETER	T.S.B (mg%)	NO. OF CASES	R
1 (4.5)	7.00 - 7.70	2	0.407
2 (6.0)	-	-	0.407
2.5 (7.57)	7.00 - 12.5	3	0.407
3 (10.3)	14.50	1	0.407
3.5 (12.31)	8.70 - 14.70	5	0.407
4.5 (19.06)	10.00 - 26.50	5	0.407

Mean of absolute difference between icterometer and
total serum bilirubin is 0.86

Table (14)

CORRELATION BETWEEN ICTEROMETER AND T.S.B (mg%)

IN INFANT BETWEEN 2.5 AND 3.5 kg Group 2.

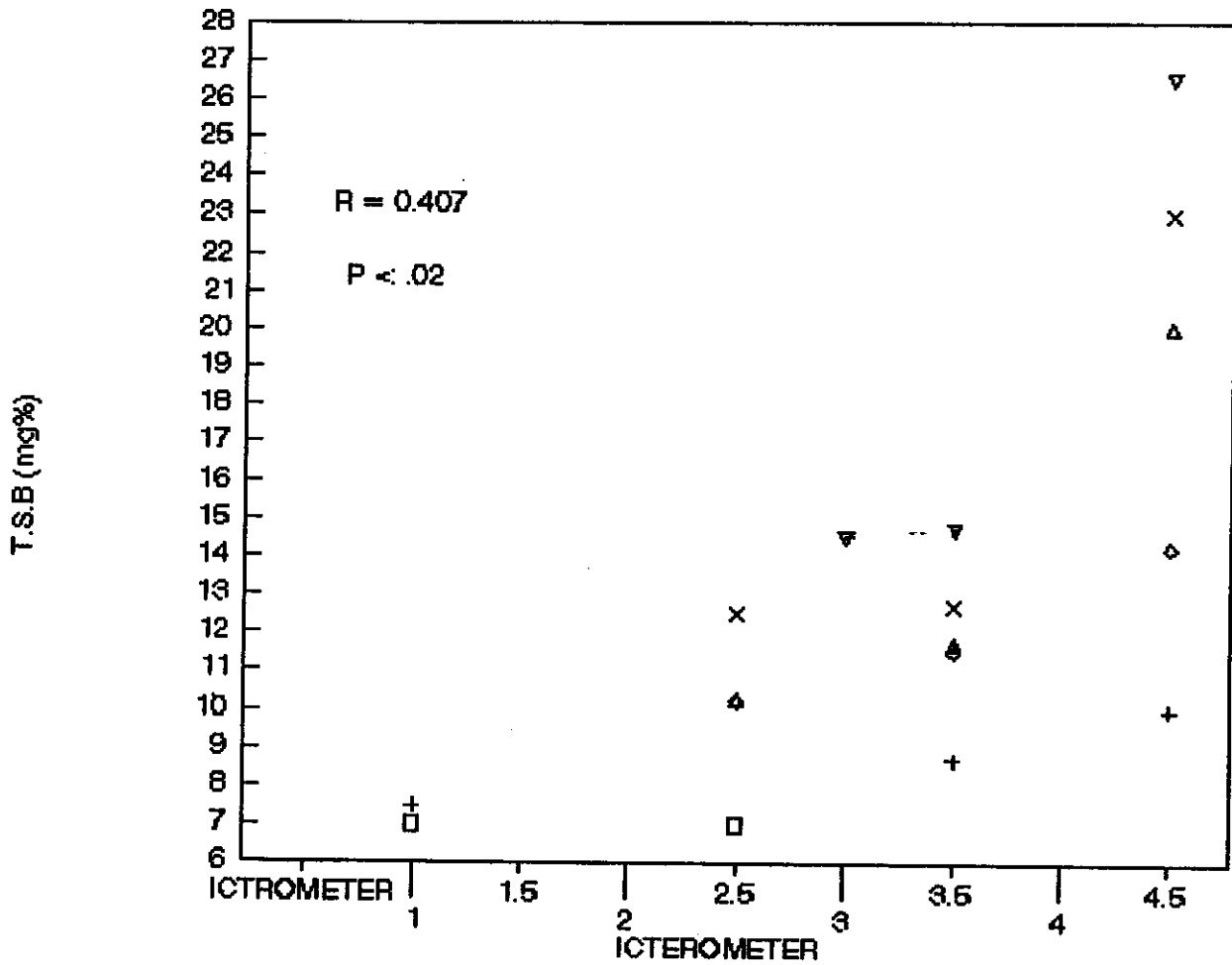


Fig. (9)

ELATIONSHIP BETWEEN SKIN ZONE AND T.S.B (mg%) IN INFANTS WEIGHT BETWEEN 2.5 AND 3.5 Kg (GROUP II)

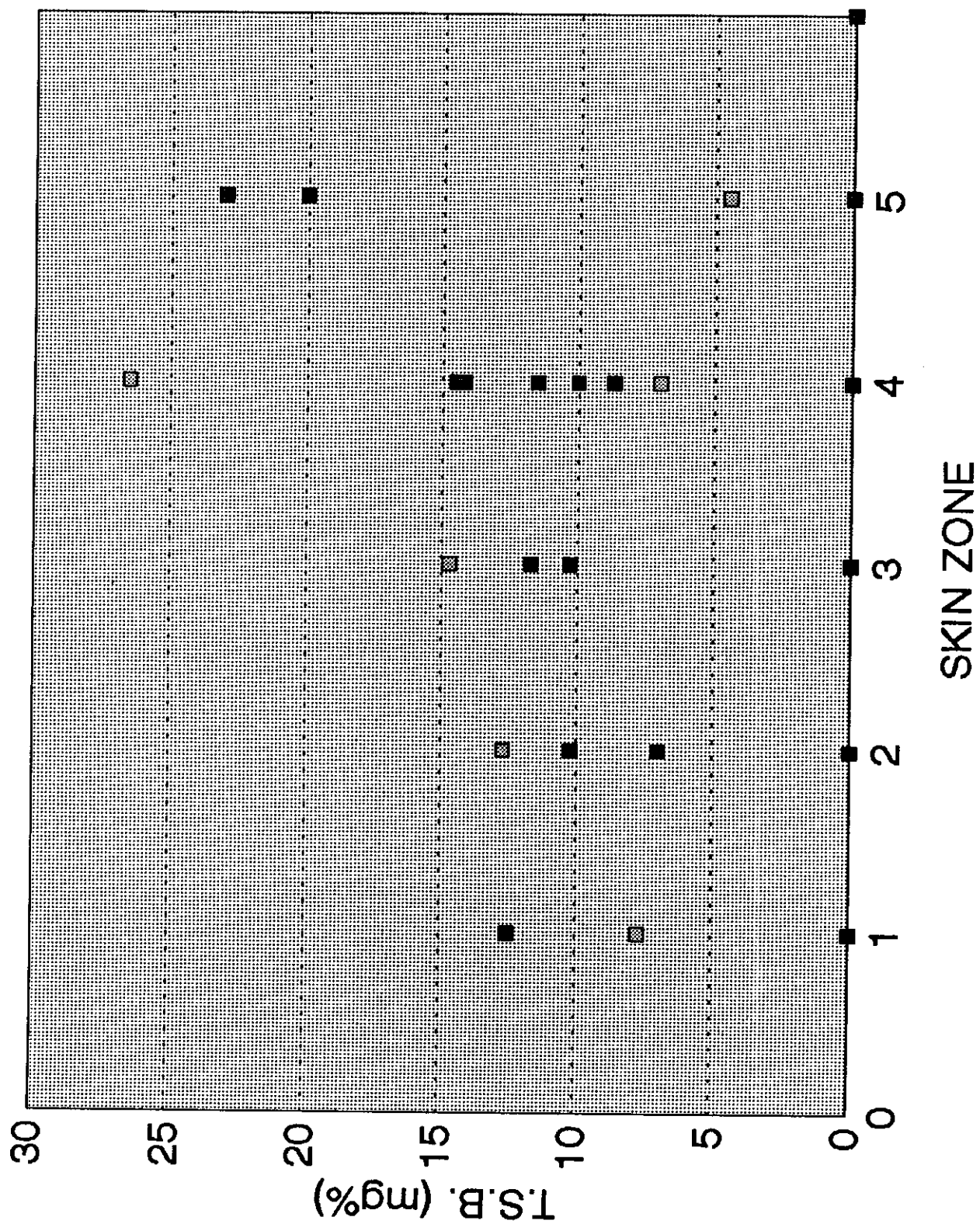


Fig. (10)

ELATIONSHIP BETWEEN SKIN ZONE AND ICTEROMETER IN IPANIS WEIGHI BE IWEEN 2.5 AND 3.5 Kg (GROUP II)

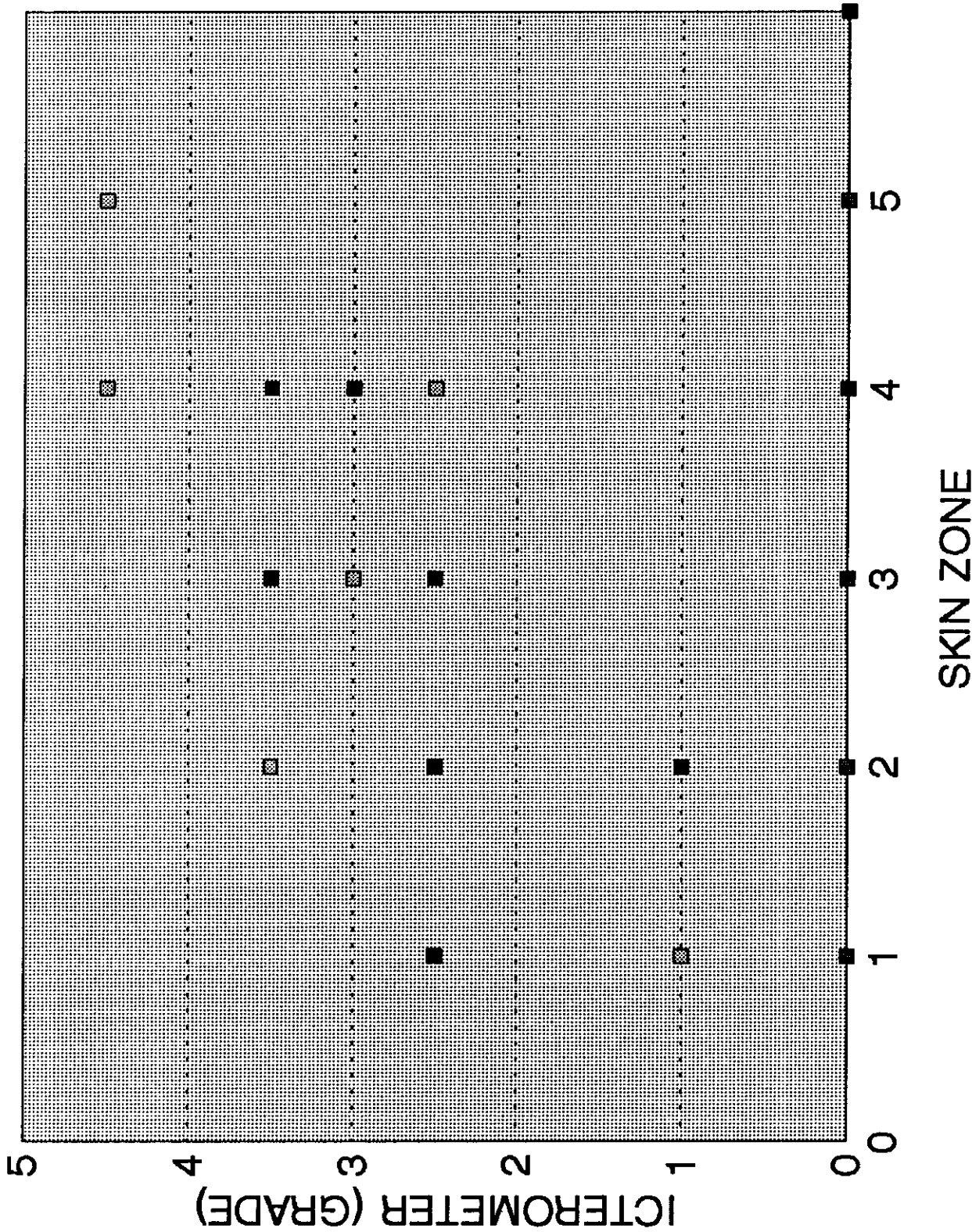


Fig. (11)

GROUP 3.

22 newborns with jaundice their weight less than 2.5 kg were included in our study, their icterometer reading ranged between 1 - 4.5 (5 - 19.06) which coincide with S.B between 4.5 to 18mg% with mean of absolute difference 9.5 table (15).

The relation between skin zones , icterometer and TSB are shown in table (17).

There is correlation between icterometer and T.S.B, with R value = .307 t-test was done and show insignificant correlation .

There is wide discrepancy between staining of skin (skin zones and T.S B reading .table (16).

As these infants become severely icteric at low serum bilirubin . Fig. (12,13,14).

We classified our cases according to gestational age into 2 groups :

Group A. : Full term infants (less than 37 weeks)

Group B. : preterm infants (more than 37 weeks).

RELATION BETWEEN SKIN ZONE , ICTEROMETER AND S. BILIRUBIN

IN INFANTS WEIGHTED LESS THAN 2.500 kg

Group. 3

SKIN ZONE	ICTEROMETER	T.S.B
1	1 (5.00) mg%	4.50 mg%
2	2 (6.00) mg%	10.70 mg%
2	3.5 (12.31) mg%	10.70 mg%
2	3.5 (12.31) mg%	9.50 mg%
2	3.5 (12.31) mg%	9.30 mg%
2	2.5 (7.57) mg%	8.90 mg%
3	4 (15.73) mg%	15.20 mg%
3	3.5 (12.31) mg%	14.60 mg%
3	2.5 (7.57) mg%	12.90 mg%
3	3.5 (12.31) mg%	12.00 mg%
3	2.5 (7.57) mg%	11.30 mg%
3	3.5 (12.31) mg%	8.40 mg%
3	3.5 (12.31) mg%	8.40 mg%
3	4.5 (19.06) mg%	8.40 mg%
3	3.5 (12.31) mg%	7.80 mg%
4	4.5 (19.06) mg%	17.00 mg%
4	3.5 (12.31) mg%	13.90 mg%
4	3.5 (12.31) mg%	13.00 mg%
4	3.5 (12.31) mg%	12.20 mg%
4	3.5 (12.31) mg%	12.00 mg%
4	3.5 (12.31) mg%	11.70 mg%
5	3.5 (12.31) mg%	18.00 mg%

Table (17)

SKIN ZONE	T.S.B(mg%)	NO. OF CASES
1	4.50	1
2	8.9 – 10.7	5
3	7.8 – 15.2	9
4	11.7 – 17.0	6
5	18.00	1

Table (16)

ICTEROMETER	T.S.B (mg%)	NO. OF CASES	R
1	4.50	1	307
2	6.00	1	307
2.5	8.9 – 12.9	3	307
3.5	7.8 – 18	14	307
4	15.20	1	307
4.5	8.4 – 17.00	2	307

Mean of absolute difference is 9.5

Table (15)

RELATIONSHIP BETWEEN SKIN ZONE AND I.S.B. (mg%) IN INFANT'S WEIGHT LESS THAN . (GROUP II)

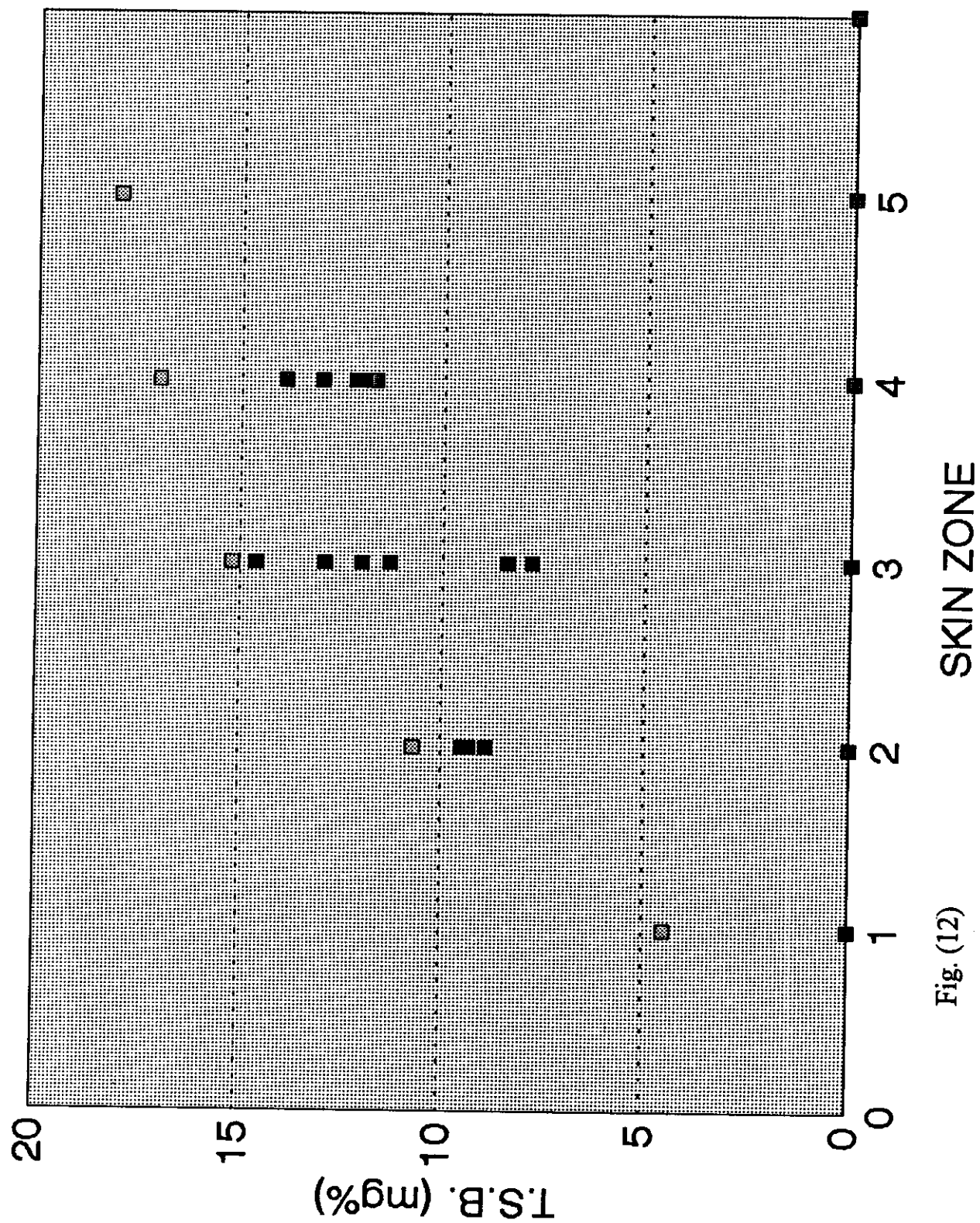


Fig. (12)

RELATIONSHIP BETWEEN ICTEROMETER AND T.S.B. IN INFANTS WEIGHT LESS THAN 2.5 KG. (GROUP III).

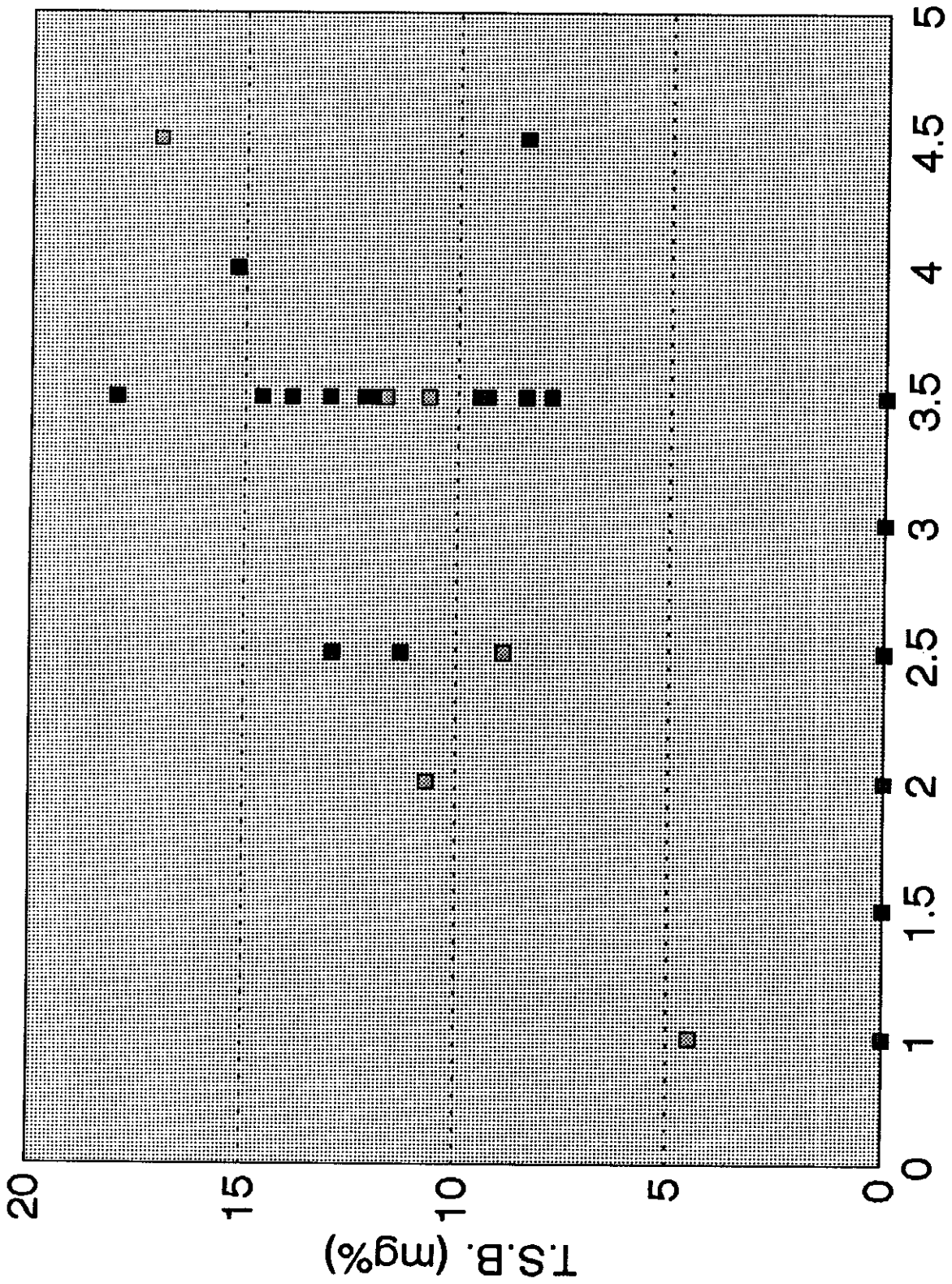
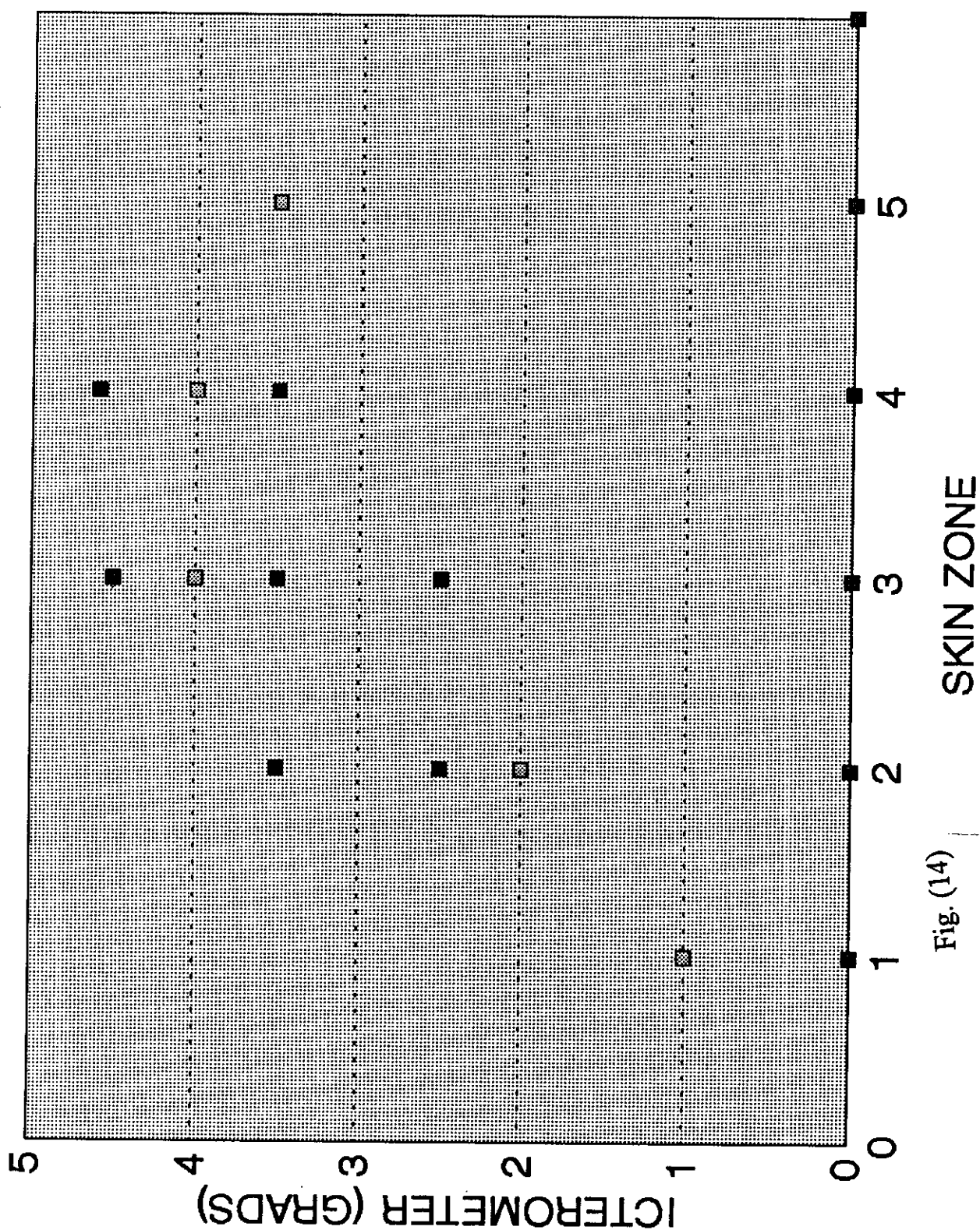


Fig. (13)

RELATIONSHIP BETWEEN SKIN ZONE AND ICTEROMETER IN INFANTS WEIGHT LESS THAN 2.5 KG. (GROUP III).



GROUP B.

Full term infants .

28 newborns with jaundice their gestational age more than 37 weeks (full term) were included in our study their icterometer reading ranged between 1 - 4.5 (5 - 19.06mg%) which coincide with serum bilirubin between 6.67 to 26.5 mg% with mean absolute difference was 0.86 (Table (18)), fig. (16).

Correlation between icterometer reading and total serum bilirubin with $R = 0.7$, $P \text{ value} < 0.05$.

Correlation between distribution of dermal staining (skin zone) and icterometer reading and serum bilirubin , are shown in table (19), (20) fig. (16,17).

RELATIONSHIP BETWEEN SKIN ZONE, ICTEROMETER
AND T.S.B IN FULL TERM INFANTS. (Group B)

NO.	SKIN ZONE	ICTEROMETER	T.S.B(mg%)
1	1	1 (5)	7.7
2	2	1 (5)	7
3	1	1.5 (6)	6.67
4	2	2.5 (7.57)	10.2
5	2	2.5 (7.57)	10.3
6	4	2.5 (7.57)	7
7	1	2.5 (7.57)	12.6
8	4	3 (10.03)	14.5
9	3	3.5 (12.31)	8.4
10	3	3.5 (12.31)	14.7
11	3	3.5 (12.31)	14.6
12	2	3.5 (12.31)	12.7
13	2	3.5 (12.31)	9.3
14	3	3.5 (12.31)	17.3
15	4	3.5 (12.31)	15.5
16	3	3.5 (12.31)	13
17	3	3.5 (12.31)	11.7
18	4	3.5 (12.31)	11.2
19	4	4 (15.73)	19.4
20	4	4 (15.73)	16.6
21	3	4.5 (19.06)	8.4
22	4	4.5 (19.06)	26.5
23	5	4.5 (19.06)	23
24	4	4.5 (19.06)	20.2
25	5	4.5 (19.06)	20
26	4	4.5 (19.06)	19.2
27	4	4.5 (19.06)	15.9
28	4	4.5 (19.06)	14.2

Table (20)

skin zone	T.S.B (mg%)	No. of cases
1	6.67 - 12.5	3
2	7 - 12.7	5
3	8.4 - 17.3	7
4	7 - 26.5	11
5	20 - 23	2

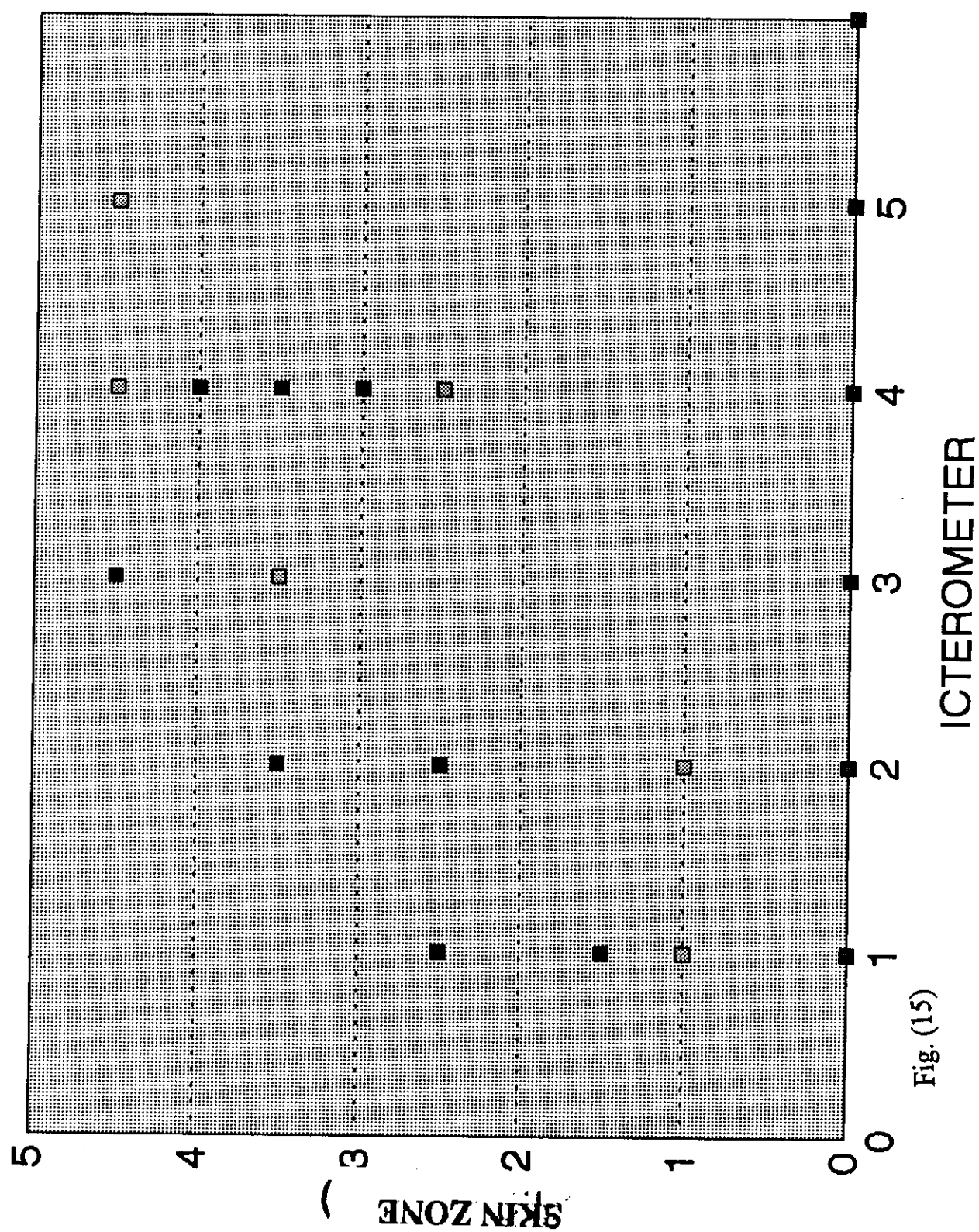
Table (19)

Icterometer	T.S.B (mg%)	No. of cases	R
1	7 - 7.7	2	
1.5	6.67	1	
2.5	7 - 12.5	4	
3	14.5	1	
3.5	8.4 - 17.3	10	
4	16.6 - 19.4	2	
4.5	8.4 - 26.5	8	

Mean of absolute difference is 0.86

Table (18)

RELATIONSHIP BETWEEN SKIN ZONE AND ICTEROMETER IN FULL TERM INFANTS (> 37 WEEKS) (GROUP B).



RELATIONSHIP BETWEEN ICTEROMETER AND T.S.B. IN FULL TERM INFANTS (> 37 WEEKS) (GROUP B).

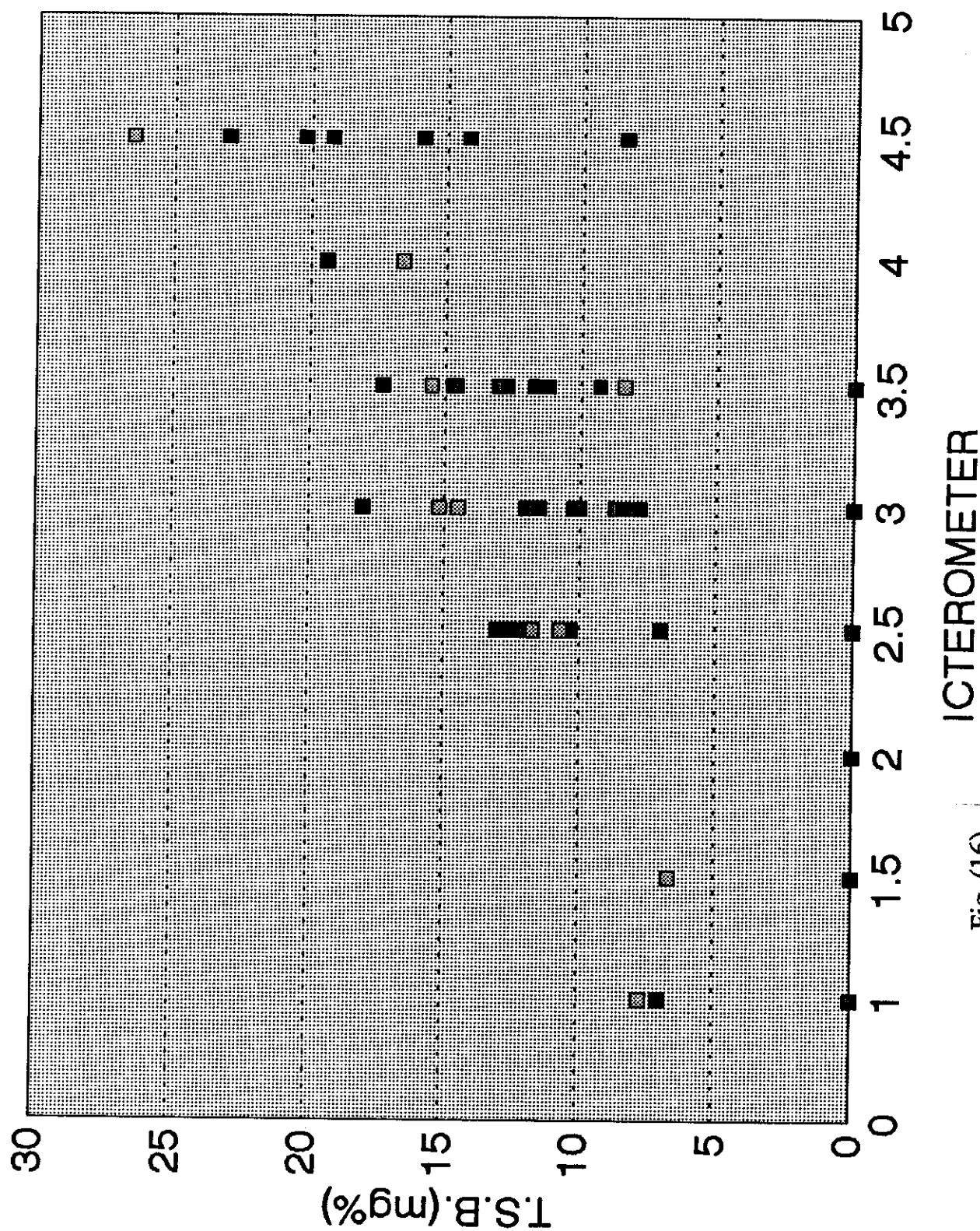


Fig. (16)

RELATIONSHIP BETWEEN SKIN ZONE AND T.S.B. IN FULL TERM INFANTS (> 37 WEEKS) (GROUP B).

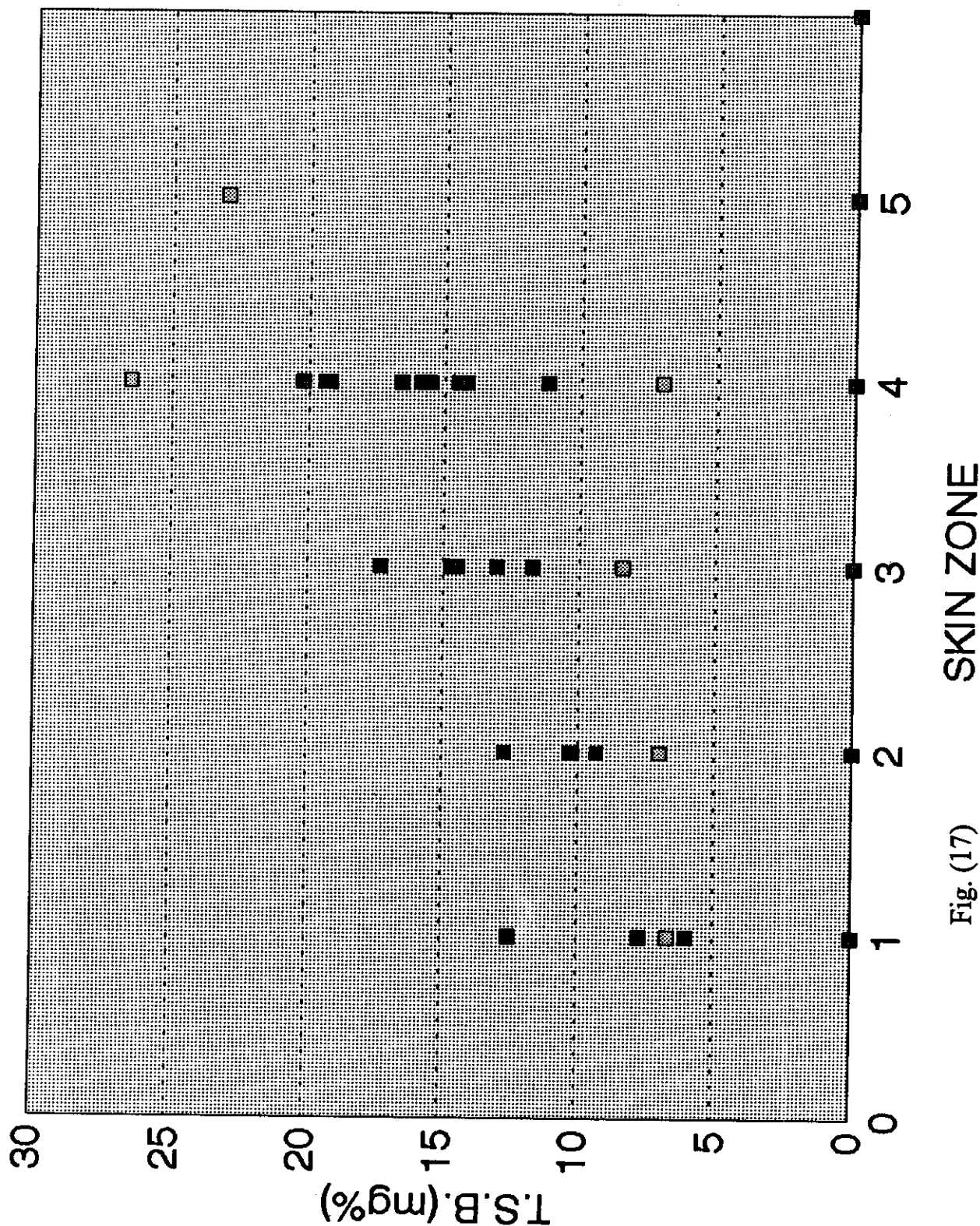


Fig. (17)

GROUP A₁

PRETERM INFANTS.

24 newborns with jaundice their gestational age less than 37 weeks were included in our study , their icterometer reading ranged between 1.5 - 4.5 (6 - 19.06) which coincide with serum bilirubin between 4.5 to 18 mg% with mean absolute difference was 0.39 , table (21) , Fig.(18)). There was correlation between icterometer reading and distribution of dermal staining (skin zone and total serum bilirubin shown in fig. (19),(20) .and table (22 , 23) .

t-test was applied to our results and indicate insignificant correlation between icterometer and T.S.B .

RELATIONSHIP BETWEEN SKIN ZONE AND ICTEROMETER

AND T.S.B IN PRETERM INFANTS (< 37 WEEKS)

(Group A)

NO.	SKIN ZONE	ICTEROMETER	T. S. B (mg%)
1	1	1.5 (6.00)	7.67
2	1	1.0 (6.00)	4.5
3	2	4.5 (19.06)	9.5
4	2	3.5 (12.31)	12.7
5	2	3.5 (12.31)	10.7
6	2	3.5 (12.31)	10.7
7	2	3.5 (12.31)	8.9
8	3	3.5 (12.31)	8.4
9	3	3.5 (12.31)	7.8
10	3	3.5 (12.31)	10.26
11	3	3.5 (12.31)	15.2
12	3	3.5 (12.31)	12
13	3	2.5 (7.57)	11.3
14	3	2.5 (7.57)	12.9
15	4	4.5 (19.06)	17
16	4	4.0 (15.73)	13.9
17	4	3.5 (12.31)	11.5
18	4	3.5 (12.31)	12
19	4	3.5 (12.31)	10
20	4	3.5 (12.31)	8.7
21	4	3.5 (12.31)	11.7
22	4	2.5 (7.57)	12.2
23	4	2.5 (7.57)	13
24	5	3.5 (12.31)	18

Table (22)

ICTEROMETER	T.S.B(mg%)	NO. OF CASES
1 (5.00)	4.5	1
1.5 (6.00)	7.67	1
2.5 (7.57)	11.3 - 13	4
3.5 (12.31)	7.8 - 18	15
4 (14.73)	13.9	1
4.5 (19.06)	9.5 - 17	2

Table (21)

Mean of absolute difference 0.39

SKIN ZONE	T.S.B(mg%)	NO. OF CASES
1	4.5 - 7.67	2
2	8.9 - 12.7	5
3	7.8 - 12.9	7
4	8.7 - 17	9
5	18	1

Table (23)

RELATIONSHIP BETWEEN ICTEROMETER AND I.S.B. IN PRETERM INFANTS (< 37 WEEKS) (GROUP A).

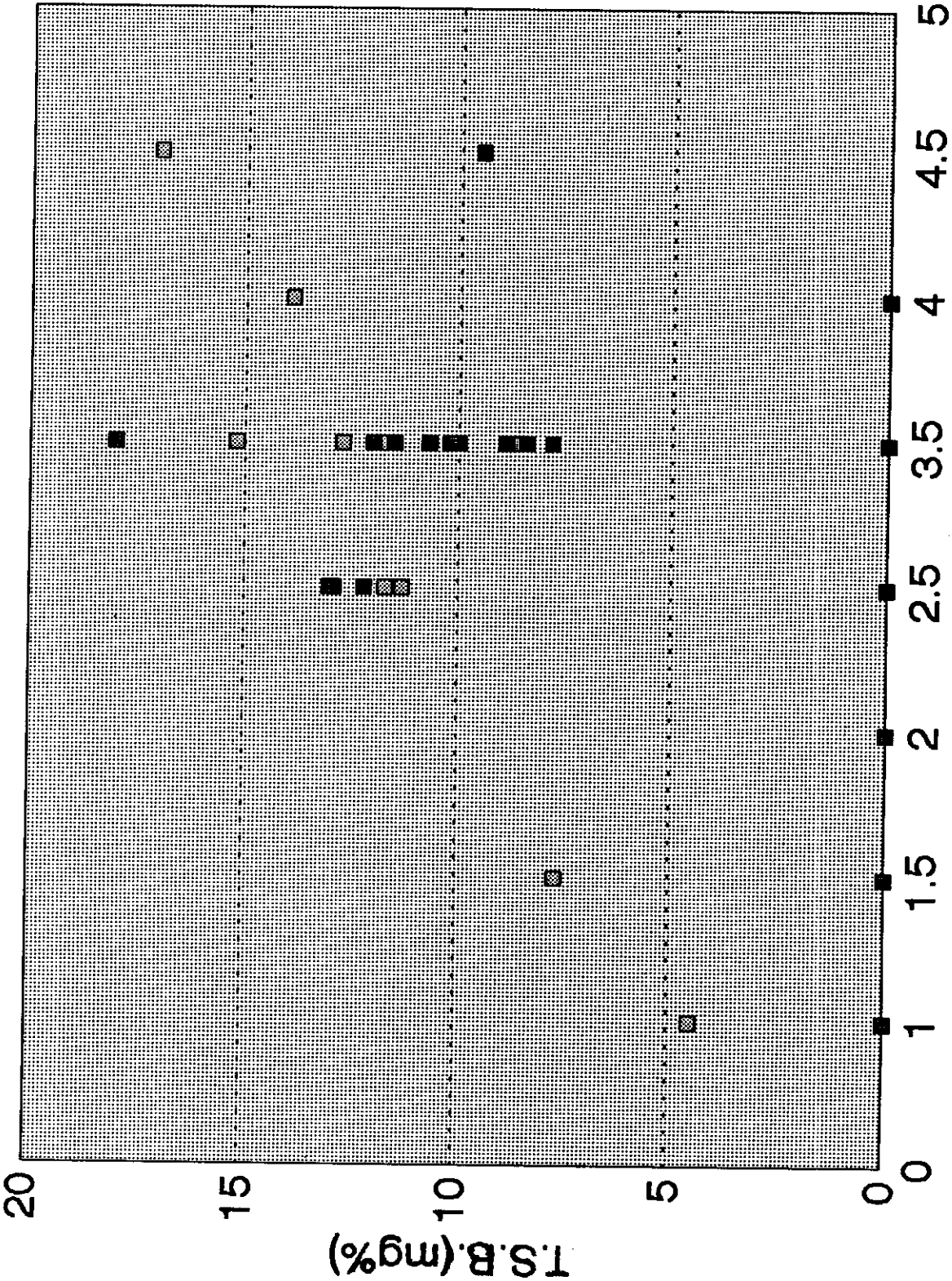


Fig. (18) ICTEROMETER

RELATIONSHIP BETWEEN SKIN ZONE AND ICTEROMETER IN PRETERM INFANTS (< 37 WEEKS) (GROUP A).

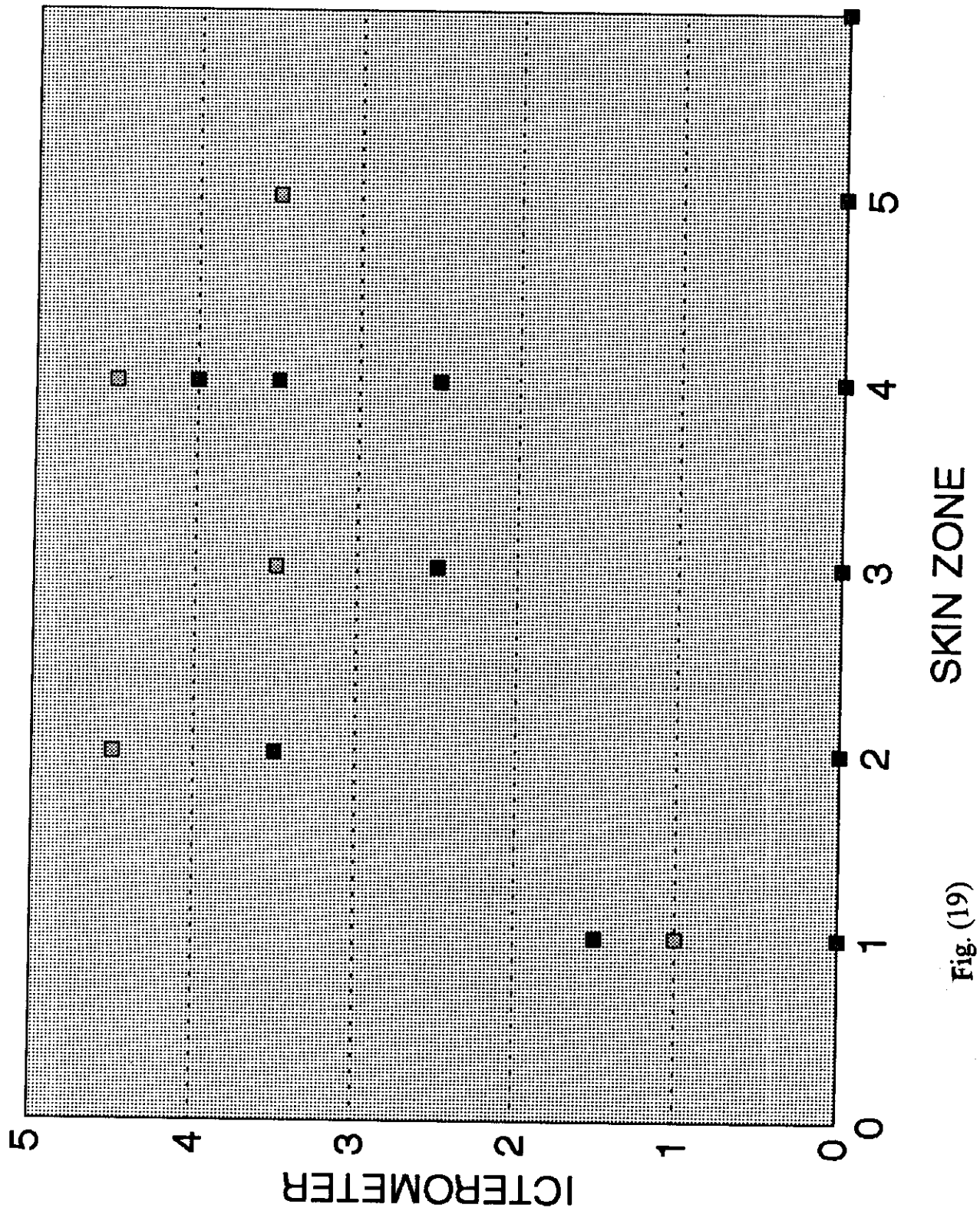


Fig. (19)

RELATIONSHIP BETWEEN SKIN ZONE AND T.S.B. IN PRETERM INFANTS (< 37 WEEKS) (GROUP A).

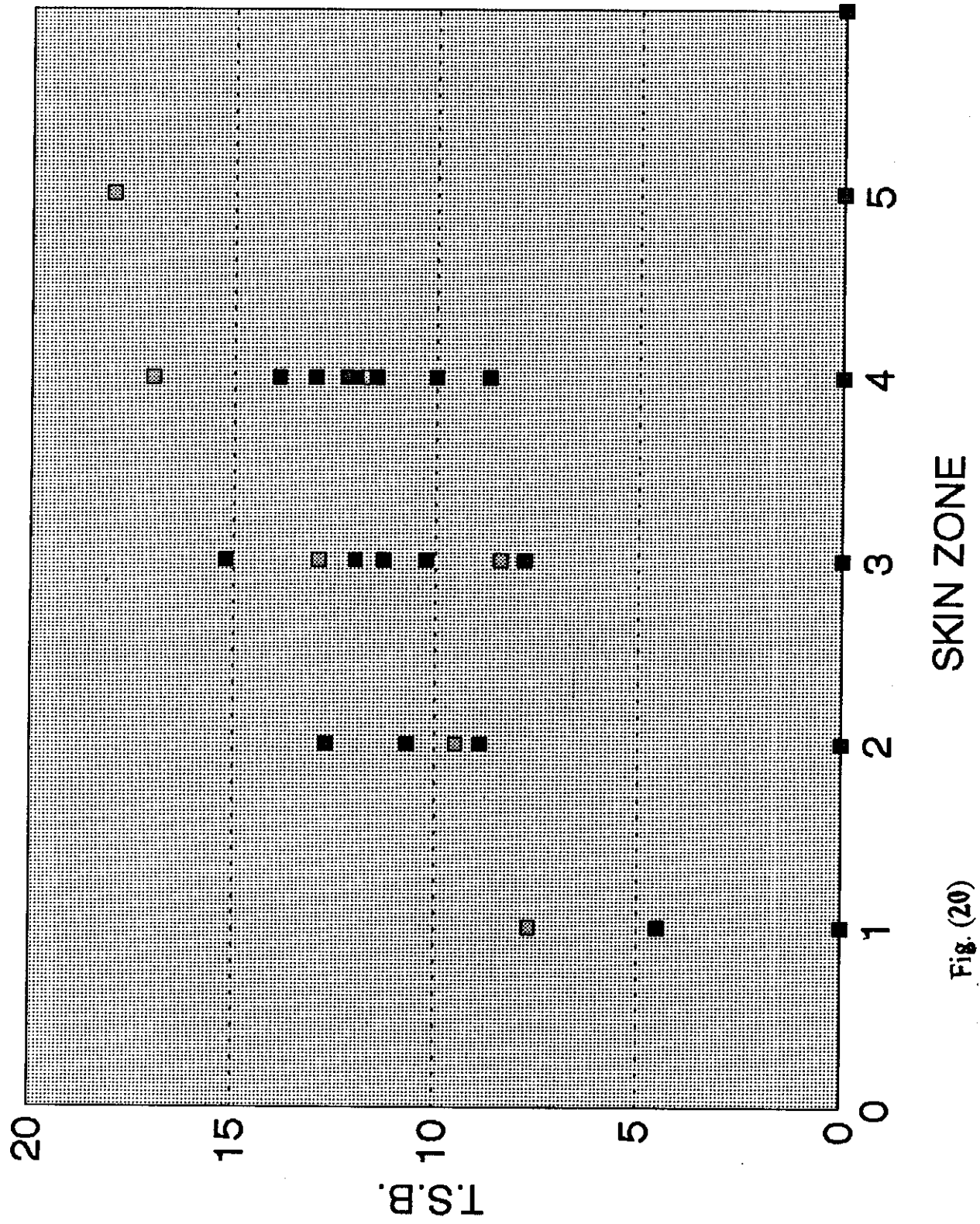


Fig. (20)