

# ***RESULTS***

**Table (3) Distribution of cases according to the mean gestational age , weight and sex**

	Gr. I		Gr. II		t	P
	$\bar{X}$	SD	$\bar{X}$	SD		
G. A.	30.4	2.6	31.3	2.2	1.30	0.198
Wt .	1.754	0.453	1.910	0.452	1.21	0.231
Sex	14 (56%)	11 (44%)	11 (46%)	13 (54%)		0.221

$P > 0.05$  = not significant

Gr<sub>I</sub> = iodine group

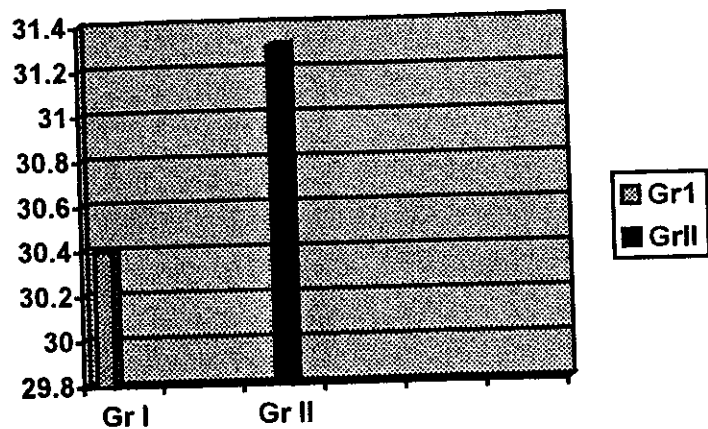
Gr<sub>II</sub> = chlorhexidine group .

G . A = gestational age in weeks

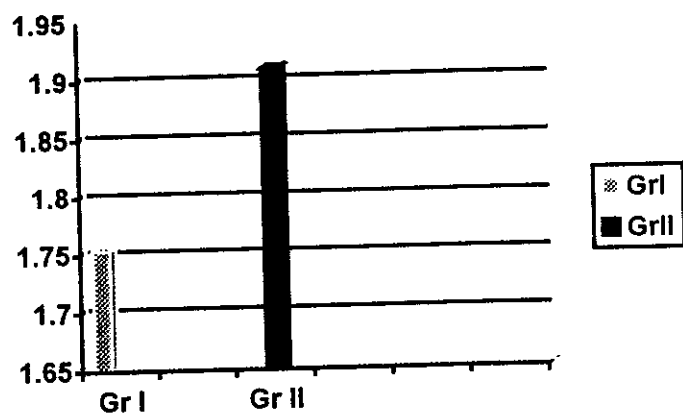
Wt . = weight in kilograms

$\bar{X}$  = mean

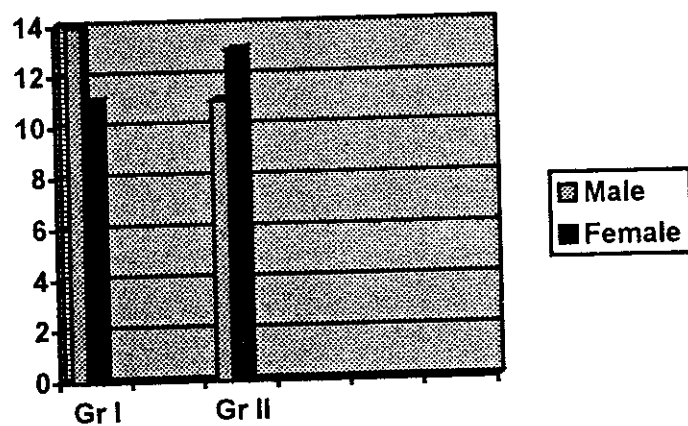
S.D = standard deviation



**Fig (15-1) Distribution of cases according to the mean gestational age**



**Fig (15-2) Distribution of cases according to the mean weight**

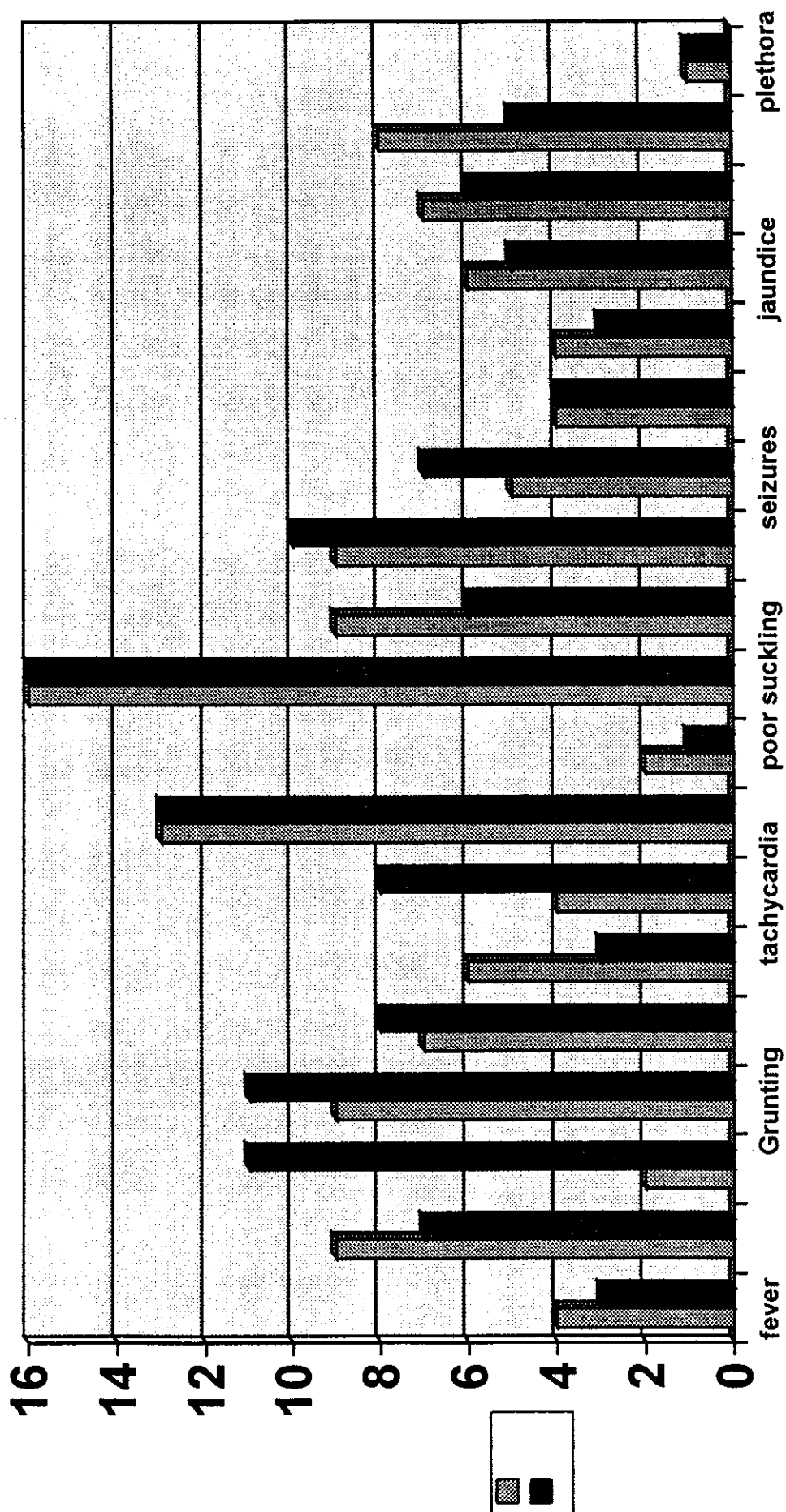


**Fig (15-3) : Distribution of cases according to sex**

**Table (4) Frequency of clinical data in the two groups**

Item	Gr. I		Gr. II		X2	P
	N	%	N	%		
Fever	4	16%	3	12.5%	0.12	0.726
Hypothermia	9	36	7	29	0.26	0.610
Tachypnea	2	8	11	45.8	8.99	0.002
Grunting	9	36	11	45.8	0.49	0.484
Apnea	7	28	8	33.3	0.16	0.686
Bradycardia	6	24	3	12.5	1.08	0.299
Tachycardia	4	16	8	33.3	1.99	158
Absent or weak Moro reflex	13	52	13	54	-	-
Exaggerated Moro reflex	2	8	1	4.1	0.31	0.576
Poor suckling	16	64	16	66.6	-	-
Vomiting	9	36	6	25	-	-
Abdominal distension	9	36	10	41.6	0.17	0.684
Seizures	5	20	7	29	0.56	0.456
Pulsing fontanelles	4	16	4	16.6	-	-
Organomegaly	4	16	3	12.5	0.12	0.726
Jaundice	6	24	5	20.8	0.07	0.791
Cyanosis	7	28	6	25	0.06	0.812
Pallor	8	32	5	20.8	0.78	0.376
Plethora	1	4	1	4.1	-	-

$P < 0.05$  = significant

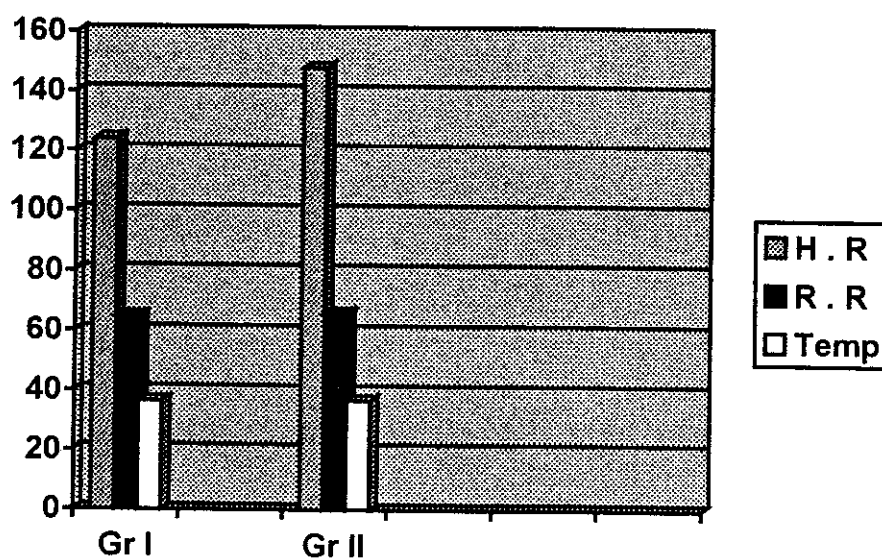


**Fig (16) Frequency of clinical data in the two groups**

**Table (5) The mean heart rate , respiratory rate and temperature in the two groups**

	Gr. I		Gr. II		t	P
	$\bar{X}$	S.D.	$\bar{X}$	S.D.		
H . R	124	31	148	26	2.96	0.005
R . R	65	13	66	13	0.1	0.91
Temp	36.6	1.2	36.8	0.8	0.47	.0643

$P < 0.05 = \text{sig.}$

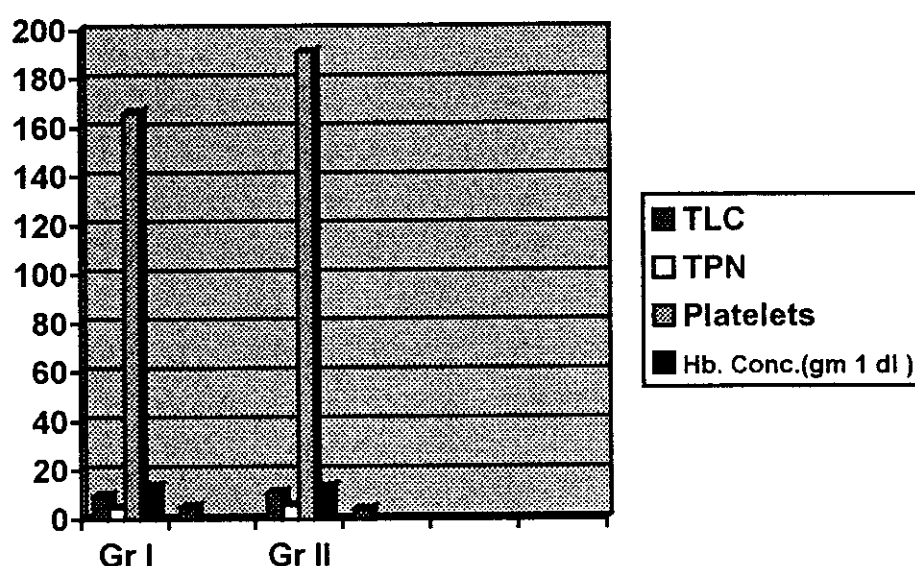


**Fig. (17) The mean heart rate , respiratory rate and temperature in the two groups**

**Table (6) Frequency of routine laboratory investigations in the 2 groups**

	Gr. I		Gr. II		t	P
	X	SD	X	SD		
TLC	9584	5052	10962	4013	1.05	0.297
TPN	4487	2795	5666	3010	1.42	0.1262
TPN %	45.8%	11.8	51.9%	16.8	1.49	0.143
Platelets	166000	85000	191000	46000	1.3	0.199
Hb. Conc.(gm / dl )	13.4	3.5	13	3.1	0.14	0.886

$P > 0.05$  = not significant



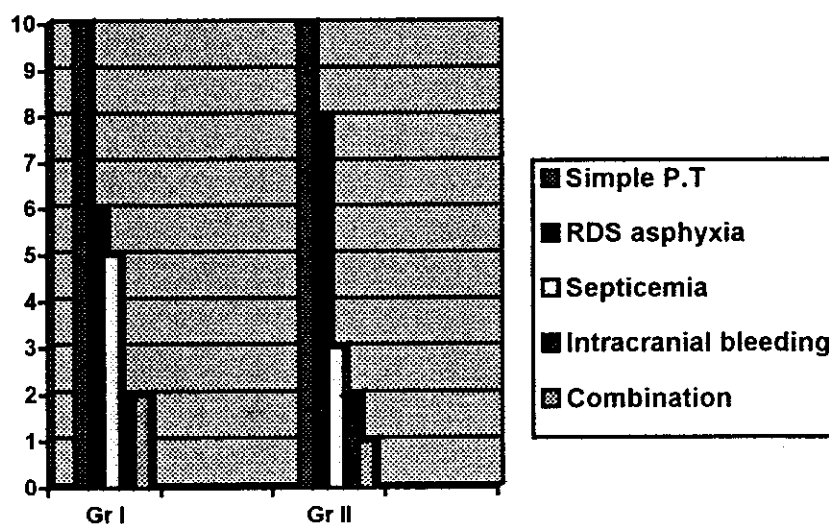
**Fig. (18) Frequency of routine laboratory investigations in the 2 groups**

**Table ( 7) Distribution of  
cases according to diagnosis**

Diagnosis	Gr. I		Gr. II	
	N	%	N	%
Simple P.T	10	40	10	31.7
RDS asphyxia	6	24	8	33.3
Septicemia	5	20	3	12.5
Intracranial bleeding	2	8	2	8.3
Combination	2	8	1	4.2

$$\overline{X^2} = 1.10$$

$P = 0.894$  ( not significant )



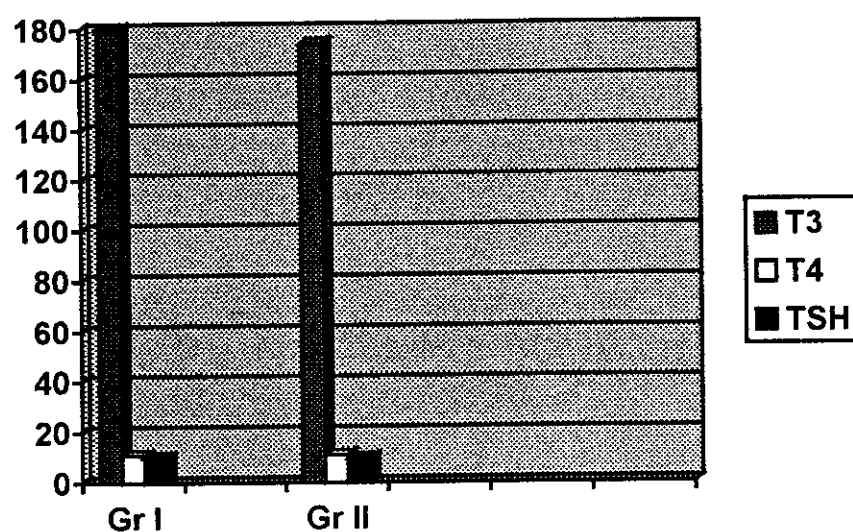
**Fig. (19) Distribution of  
cases according to diagnosis**



**Table (8) Comparison between the levels of T3 , T4 and TSH in the 2 groups at the first day of admission**

	Gr. I		Gr. II		t	P
	$\bar{X}$	SD	$\bar{X}$	SD		
T3(ng /dl)	179.9	14.9	174	21.7	1.1	0.278
T4( $\mu$ g/dl)	11.1	0.543	10.9	0.75	4.05	0.060
TSH( $\mu$ IU/dl)	9.9	0.31	9.6	0.52	3.46	0.059

$P > 0.05$  = not significant

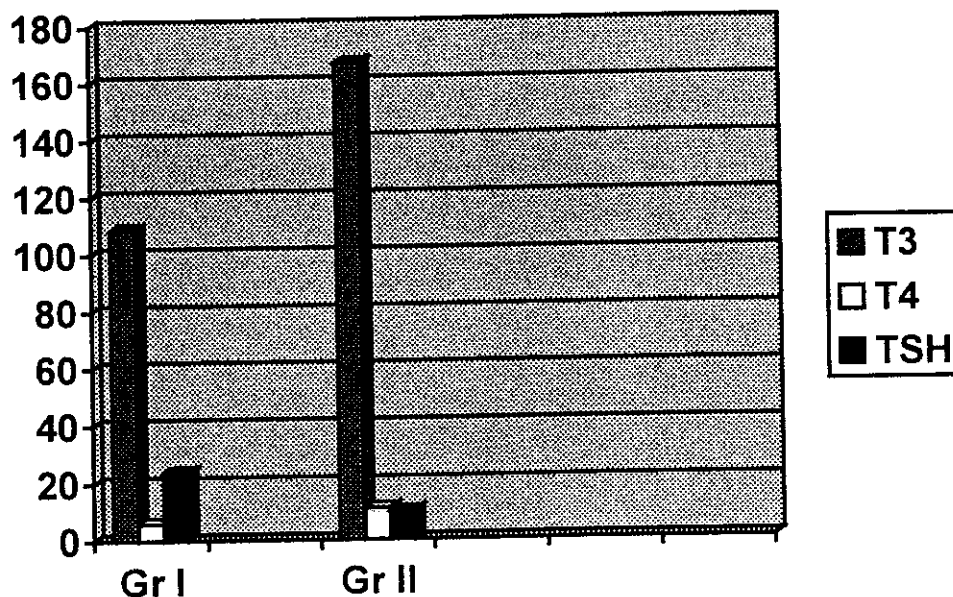


**Fig.(20) Comparison between the levels of T3 , T4 and TSH in the 2 groups at the first day of admission**

**Table (9) Comparison between the levels of T3 , T4 and TSH in the 2 groups at the tenth day of admission**

	Gr. I		Gr. II		t	P
	$\bar{X}$	SD	$\bar{X}$	SD		
T3(ng /dl)	108.8	17.5	167	22.5	15	0.001
T4( $\mu$ g/dl)	5.77	1.5	10.99	0.824	16	0.0001
TSH( $\mu$ IU/dl)	23.7	9.1	9.77	0.665	7.65	0.0001

$P < 0.05$  = significant

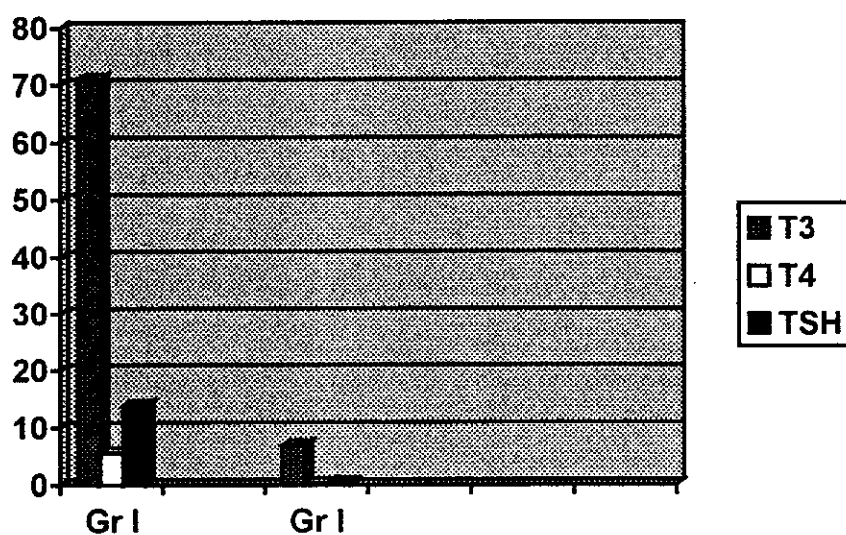


**Fig(21) Comparison between the levels of T3 , T4 and TSH in the 2 groups at the tenth day of admission**

**Table (10) study of the change in T3 , T4 and TSH level from the first day to the tenth day in the 2 groups**

	Gr. I		Gr. II		t	P
	$\bar{X}$	SD	$\bar{X}$	SD		
T3(ng /dl)	71	23.7	6.9708	20.6	15	0.0001
T4( $\mu$ g/dl)	5.62	1.73	-0.356	0.89	16.26	0.001
TSH( $\mu$ IU/dl)	13.82	9.03	-0.404	0.64	7.65	0.0001

$P < 0.05$  = significant

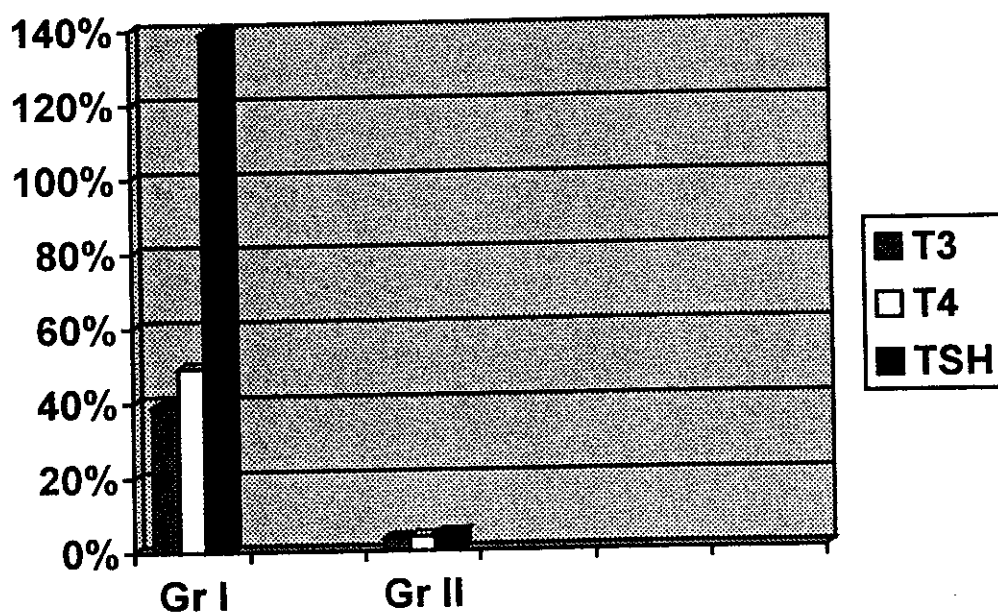


**Fig(22) study of the change in T3 , T4 and TSH level from the first day to the tenth day in the 2 groups**

**Table (11) Study of the change in T3 , T4 and TSH levels as a percentage of the first day level**

	Gr. I		Gr. II		t	P
	$\bar{X}$	SD	$\bar{X}$	SD		
T3(ng /dl)	39%	11.4%	3.3%	12.9%	10.25	0.0001
T4( $\mu$ g/dl)	49.1%	14.2%	-3.7%	8.9%	15.5	0.0001
TSH ( $\mu$ IU/dl)	-139%	90%	-4.6%	7.1%	-7.26	0.001

$P < 0.05$  = significant

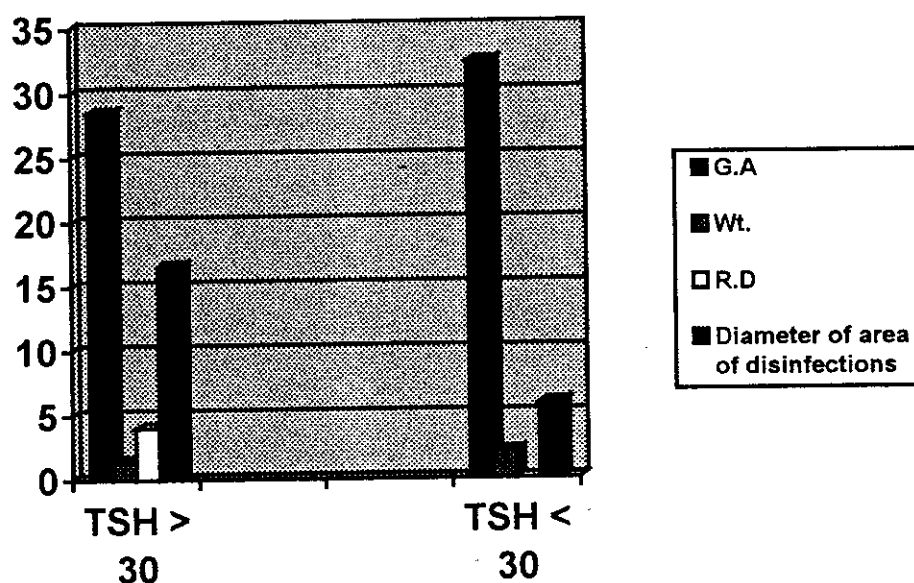


**Fig(23) Study of the change in T3 , T4 and TSH levels as a percentage of the first day level**

**Table (12) Clinical characteristics of patients with TSH levels  $> 30 \mu\text{IU/dl}$  and those of levels  $\leq 30 \mu\text{IU/dl}$  in iodine group**

	TSH $> 30$	TSH $\leq 30$	t	P
G.A	28.5 $\pm$ 2.1	32.4 $\pm$ 2.5	6.657	0.03
Wt.	1435 $\pm$ 173	2103 $\pm$ 210	7.521	0.001
R.D	4	-(0)	7.981	0.006
Diameter of area of disinfections	16.6 $\pm$ 11.04	5.9 $\pm$ 5.4	4.385	0.001

$P < 0.05$  = significant



**Fig (24) Clinical characteristics of patients with TSH levels  $> 30 \mu\text{IU/dl}$  and those of levels  $\leq 30 \mu\text{IU/dl}$  in iodine group**

**Table (13) Correlation between level changes in T3 , T4 and TSH with each other and with G.A and wt in Gr I**

	T3		T4		TSH		G . A		Wt	
	r	p	R	p	r	p	r	p	r	p
T3			0.11	0.61	0.02	0.94	0.01	0.96	0.001	0.99
T4	01	0.61			0.85	0.001	0.59	0.002	0.66	0.001
TSH	0.02	0.94	0.85	0.001			0.78	0.002	0.77	0.001
G.A	0.01	0.96	0.59	0.002	0.78	.0002			-	-
Wt	0.001	0.99	0.66	0.0001	0.77	0.001	-	-		

r = correlation coefficient

P< 0.05 = significant

P>0.05 = non significant

**Table (14) Correlation between level changes is T3 , T4 and TSH with each other and with G.A , Wt in Gr. II**

	T3		T4		TSH		G . A		Wt	
	r	p	r	p	R	p	r	p	r	p
T3	1	0	0.10	0.64	0.22	0.30	0.13	0.54	0.001	0.99
T4	0.10	0.64	1	0	0.24	0.25	0.05	0.81	0.05	0.83
TSH	0.22	0.30	0.24	0.25	1	0	0.13	0.56	0.22	0.29
G.A	0.13	0.54	0.05	0.81	0.13	0.56	1	0	-	-
Wt	0.001	0.99	0.05	0.83	0.22	0.29	-	-	1	0

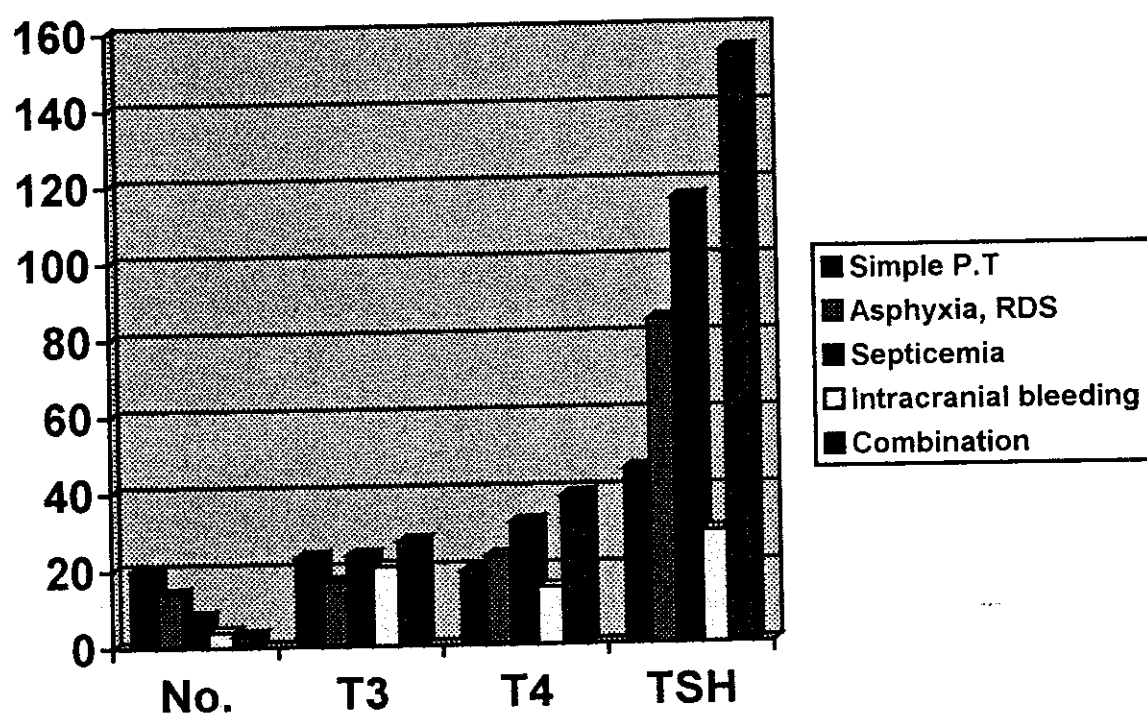
r = correlation coefficient

P< 0.05 = significant

P>0.05 = non significant

**Table (15) Comparison between the Percentage level Change in T3 , T4 and TSH in group I according to the diagnosis**

Diagnosis	No.	T3 %		T4 %		TSH %	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Simple P.T	20	23.3		19.3		45.3	
Asphyxia, RDS	14	16.9		23.1		84.1	
Septicemia	8	23.7		31.8		115.8	
Intracranial bleeding	4	20.7		14.8		29.0	
Combination	3	27.1		38.7		154.4	
F – Value	-	0.3		0.5		1.8	
P- Value	-	0.9		0.7		0.2	

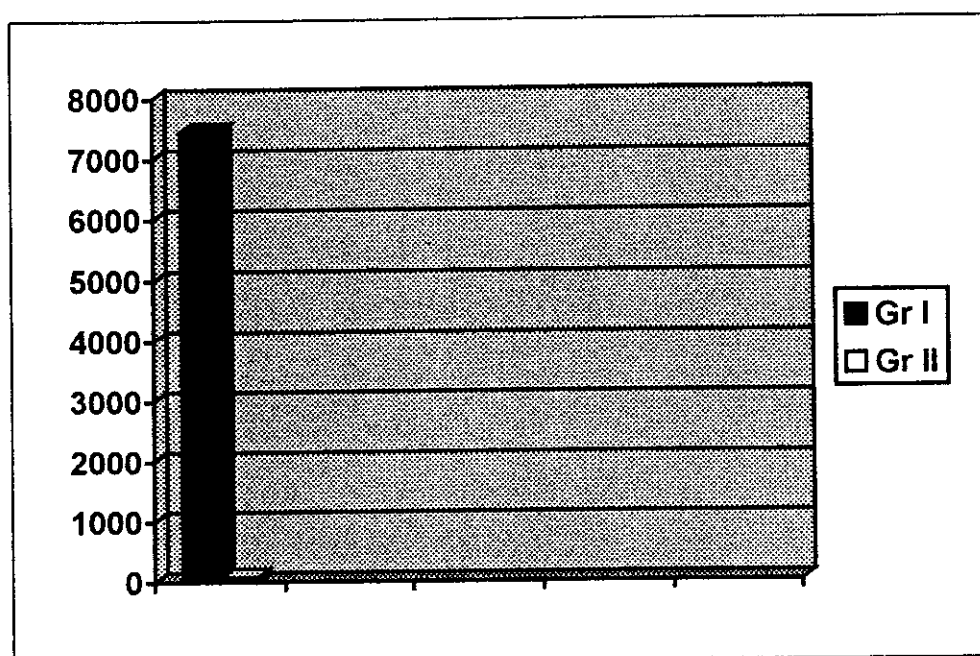


**Fig (25) Comparison between the Percentage level Change in T3 , T4 and TSH in group I according to the diagnosis**

**Table (16) Comparison between the level of urinary iodine ( $\mu\text{g/dl}$ ) in the 2 groups at the tenth day of admission**

Group	$\bar{X}$	S.D	$\bar{X}$ dif.	t	P
Gr. I	7459	4488	-	-	-
			7388	8.1	0.00001
Gr. II	70.13	12.3			

$P < 0.05$  = significant



**Fig. (26) Comparison between the level of urinary iodine ( $\mu\text{g/dl}$ ) in the 2 groups at the tenth day of admission**



**Table (17) Characteristics of cases excluded**

Cause	Number
No concent	6
Death within 48 h	8
Congenital anomalies	2
Congenital hypothyroidism	2