RESULTS

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The results obtained are summarised and illustrated in tables 4-18 and figures 7-9.

Tables 4-6 represent the gestational ages and the birth weights of our subjects; table (4) for the normal full-term controls, table (5) for the small for gestational age neonates and table (6) for the preterm ones.

Table (7) shows the hemostatic measures done to our controls. The mean value and standard deviation (SD) of the platelet counts (PC) were 205.9 ± 48.85/cmm. Those of the prothrombin times (PT) were 15.09 ± 1.79 seconds and those of the partial thromboplastin times (PTT) were 52.49 ± 5.48 seconds.

The hemostatic measures of our small for gestational age (SGA) neonates are presented in table (8). The mean platelet count was 141.25 ± 12.85/cmm which is lower than that of the controls. However, the means of PT and PTT (22.7 ± 1.9 and 91.61 ± 6.66 sec.) are obviously higher than those of our normal neonates.

Table (9) illustrates the haemostatic measures of the prematures. The mean value of their platelet counts (126.25 ± 12.88/cmm) was lower than those of the normal and SGA

babies. The means of PT and PTT (26.83 ± 2.4 and 127.8 ± 7.8 sec. respectively) were longer than those of both the controls and SGA babies.

Figures 7,8 and 9 illustrate a diagramatic comparison between the means of PC, PT and PTT respectively in the 3 groups of neonates; normal full-terms (Gr I), SGA ones (Gr II) and prematures (Gr III). It is quite clear that the mean PC is greatest in Gr I, less in Gr II and least in Gr III while the means of PT and PTT are shortest in Gr I, prolonged in Gr II and longest in Gr III.

Tables 10,11 and 12 clarify the results of t-test that shows the statistical significance of the differences between the means of PC, PT and PTT in our different groups of newborns. All the differences proved to be highly significant from the statistical point of views at P values less than 0.001.

The results of the correlation test are shown in tables 11-18.These tables revealed significant positive correlations between PC and both the birth weight and the gestational age and significant negative correlations between PT and PTT in one hand and the birth weight and gestational age in the other hand. So, the bigger the baby, the higher his platelet count and the shorter his prothrombin and partial thromboplastin times will be. Similarly, as the gestational age prolongs as the PC gets higher and the PT and PTT become shorter.

Table (4): Birth weights and gestational ages in full-term neonates.

No.	"Birth weight" (grams)	"gestational age" (weeks)
1	3100	39
2	3050	39
3	3000	38
4	3150	39
5	3350	40
6	3250	39
7	3150	38
8	3120	40
9	3100	41
10	3430	41
11	3200	40
12	3320	39
13	3055	38.5
14	3240	39.5
15	3170	41
16	3200	41.5
17	3100	39
18	3120	39.5
19	3115	40
20	3340	42
Mean	3115	39.2
SD	± 47.5	± 1.1

Table (5): Birth weights and gestational ages in SGA neonates.

No.	"Birth weight" (grams	"gestational age" (weeks)
1	2450	40
2	2400	40
3	2390	39
4	2400	41
5	2350	38.5
6	2420	39.5
7	2390	39.5
8	2430	41
9	2340	40
10	2320	39
11	2420	42
12	2440	42
13	2300	38.5
14	2460	39
15	2480	39
16	2300	38
17	2400	41
18	2470	42
19	2380	39.5
20	2370	40
Mean	2370	39.1
SD	± 30.9	± 1.3

*Table (6):*Birth weights and gestational ages in prematures

No.	"Birth weight" (grams)	"gestational age" (weeks)
1	2200	35.5
2	2270	36
3	2300	36
4	2320	36.5
5	2359	35.5
6	2350	35.5
7	2360	36.5
8	2170	34.5
9	2200	35
10	2300	35.5
11	2330	36
12	2340	36
13	2350	36
14	2220	35.5
15	2200	36.5
16	2300	35.5
17	2230	35
18	2270	35.5
19	2240	36
20	2320	36.5
Mean	2270	35.5
SD	± 40.1	± 0.8

Table (7): PC, PT and PTT in normal neonates.

No.	PC (/cmm)	PT (seconds)	PTT (seconds)
1	165.000	12.1	56.1
2	152.000	13.3	58.1
3	150.000	14.1	59.2
4	173.000	14.5	49.1
5	257.000	16.3	47.2
6	249.000	16.4	56.8
7	226.000	16.9	46.8
8	196.000	13.1	51.3
9	168.000	13.7	52.1
10	223.000	15.5	47.4
11	264.000	16.2	46.9
12	280.000	18.1	46.6
13	166.000	18.9	51.5
14	260.000	15.7	51.3
15	198.000	13.3	54.2
16	247.000	16	68.1
17	173.000	13.6	49.2
18	156.000	14.1	64.3
19	154.000	13.9	54.1
20	281.000	16.2	45.6
Mean	205.9	15.09	52.49
SD	± 8.58	± 1.79	± 5.48

Table (8): Measurements and readings for small for gestational age neonates.

No.	PC (/cmm)	PT (seconds)	PTT (seconds)
1	157.000	19.8	87.6
2	148.000	19.1	89.4
3	142.000	19.1	90.2
4	146.000	19.3	88.6
5	137.000	19.9	92.2
6	150.000	15.3	84.6
7	135.000	19.6	102.3
8	149.000	18.8	94.6
9	134.000	19.8	97.2
10	132.000	19.9	101.4
11	149.000	18.7	87.6
12	143.000	18.6	88.5
13	128.000	20.4	102.6
14	141.000	19.4	98.2
15	148.000	18.9	94.6
16	133.000	20.1	101.8
17	158.000	18.7	97.3
18	159.000	18.7	96.9
19	139.000	19.4	99.8
20	139.000	19.6	99.8
Mean	141.25	22.7	91.61
SD	± 12.85	± 1 .9	± 6.66

Table (9): PC, PT and PTT in prematures.

No.	PC (/cmm)	PT (seconds)	PTT (seconds)
1	135.000	17.1	126.1
2	127.000	18.3	138.1
3	125.000	19.1	139.2
4	123.000	19.5	129.1
5	130.000	16.3	127.2
6	125.000	21.4	136.8
7	119.000	21.9	126.8
8	140.000	18.1	131.3
9	133.000	18.7	132.1
10	120.000	20.5	127.4
11	120.000	21.2	126.9
12	115.000	23.1	126.6
13	119.000	23.9	131.5
14	128.000	20.7	131.3
15	133.000	18.3	134.2
16	124.000	21	148.1
17	143.000	18.6	129.2
18	135.000	19.1	184.3
19	138.000	18.9	134.1
20	130.000	21.2	125.6
Mean	126.25	26.83	127.8
SD	± 12.8	± 2.4	± 7.8

Table (10): T-test for platelet count (PC).

Test between	Propability(P)	Significance
PC_1 & PC_2	< 0.001	Highly significant
PC_1 & PC_3	< 0.001	Highly significant
PC_2 & PC_3	< 0.001	Highly significant

Table (11): T-test for prothrombin time (PT).

Test between	Propability(P)	Significance
PT_1 & PT_2	< 0.001	Highly significant
PT_1 & PT_3	< 0.001	Highly significant
PT_2 & PT_3	< 0.001	Highly significant

Table (12): T-test for partial thromboplastin time (PTT).

Test between	Propability(P)	Significance
PTT_1 & PTT_2	< 0.001	Highly significant
PTT_1 & PTT_3	< 0.001	Highly significant
PTT_2 & PTT_3	< 0.001	Highly significant

A) The correlation between the birth weight and PC, PT & PTT.

Table (13): In normal neonates.

	PC_1	PT_1	PTT_1
Correlation coefficient	0.72201	-0.58782	-0.59622
Significance	sign.	sign.	sign.

Table (14): In small for gestational age neonates.

	PC_2	PT_2	PTT_2
Correlation coefficient	0.63202	-0.67742	-0.67844
Significance	sign.	sign.	sign.

Table (15): In prematures.

	PC_3	PT_3	PTT_3
Correlation coefficient	0.56908	-0.79978	-0.79855
Significance	sign.	sign.	sign.

B) The correlation between gestational age and (PC, PT, PTT).

Table (16): in normal neonates.

	PC_1	PT_1	PTT_1
Correlation coefficient	0.75231	-0.64956	-0.59682
Significance	sign.	sign.	sign.

Table (17): In (SGA) small for gestational age neonates.

	PC_2	PT_2	PTT_2
Correlation coefficient	0.79452	-0.75875	-0.79889
Significance	sign.	sign.	sign.

Table (18): In premature.

	PC_3	PT_3	PTT_3
Correlation coefficient	0.85480	-0.87687	-0.87965
Significance	sign.	sign.	sign.

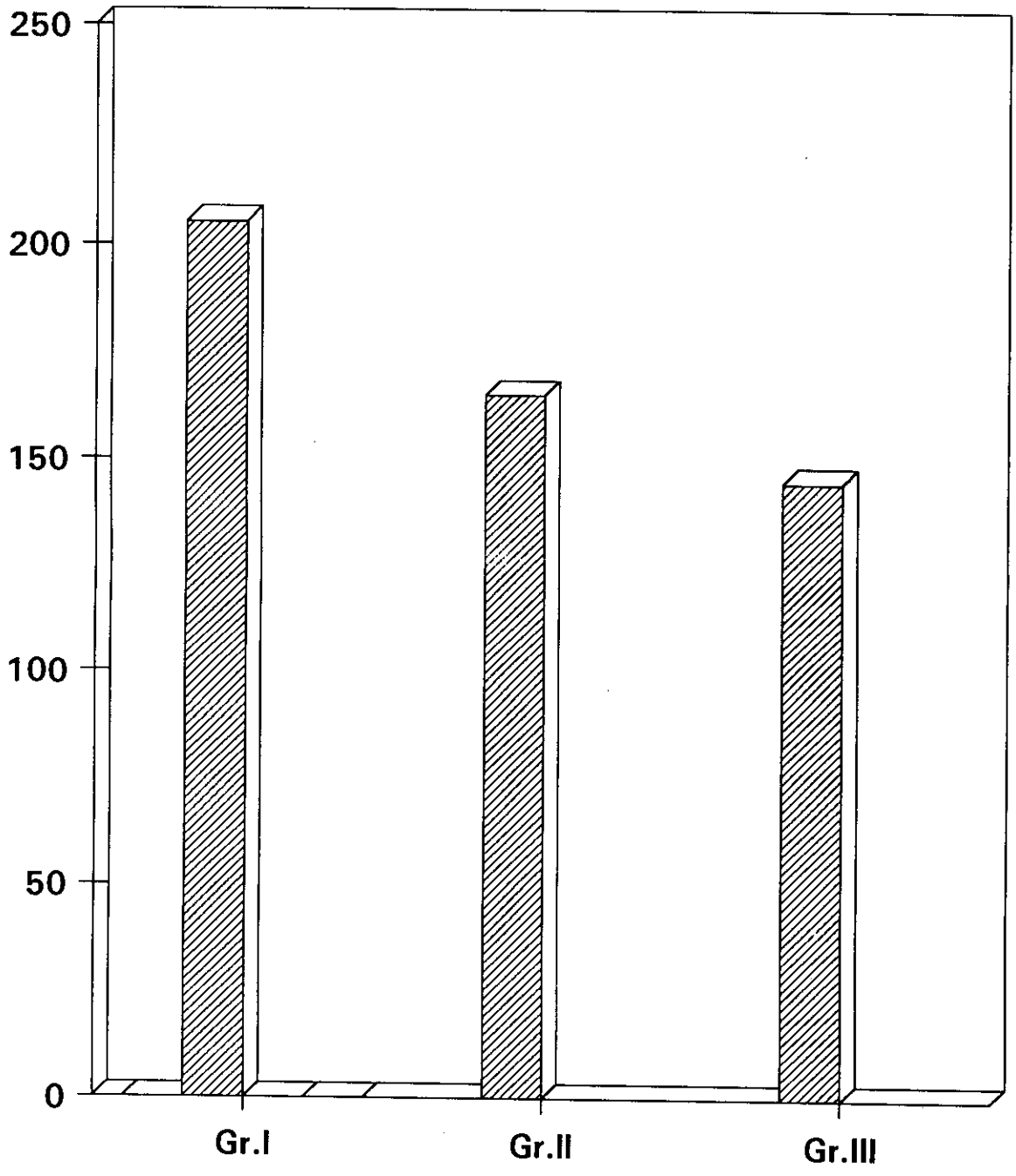

Fig. 7 : Platelet count of neonates.

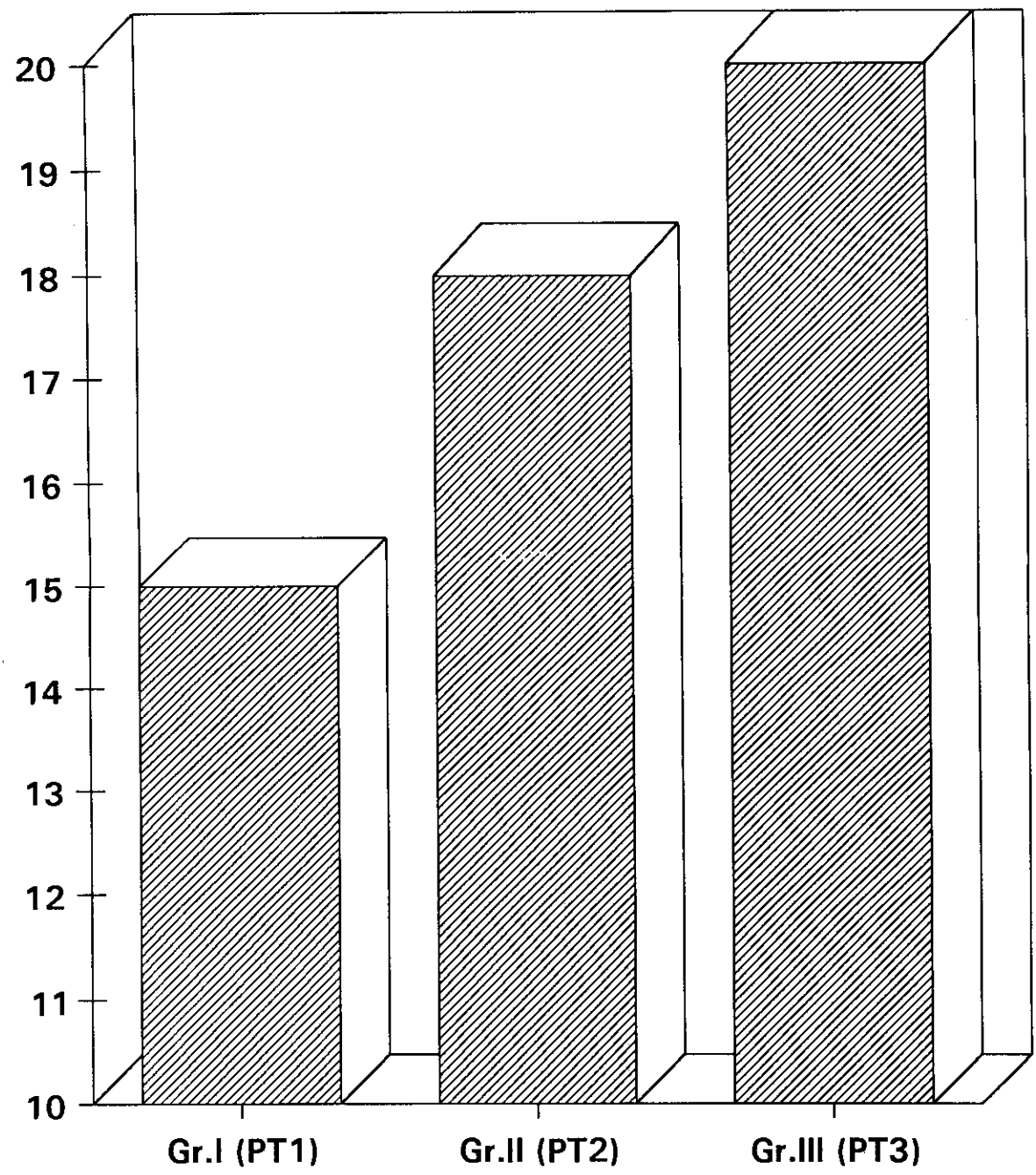

Fig. 8 : Prothrombin time of neonates

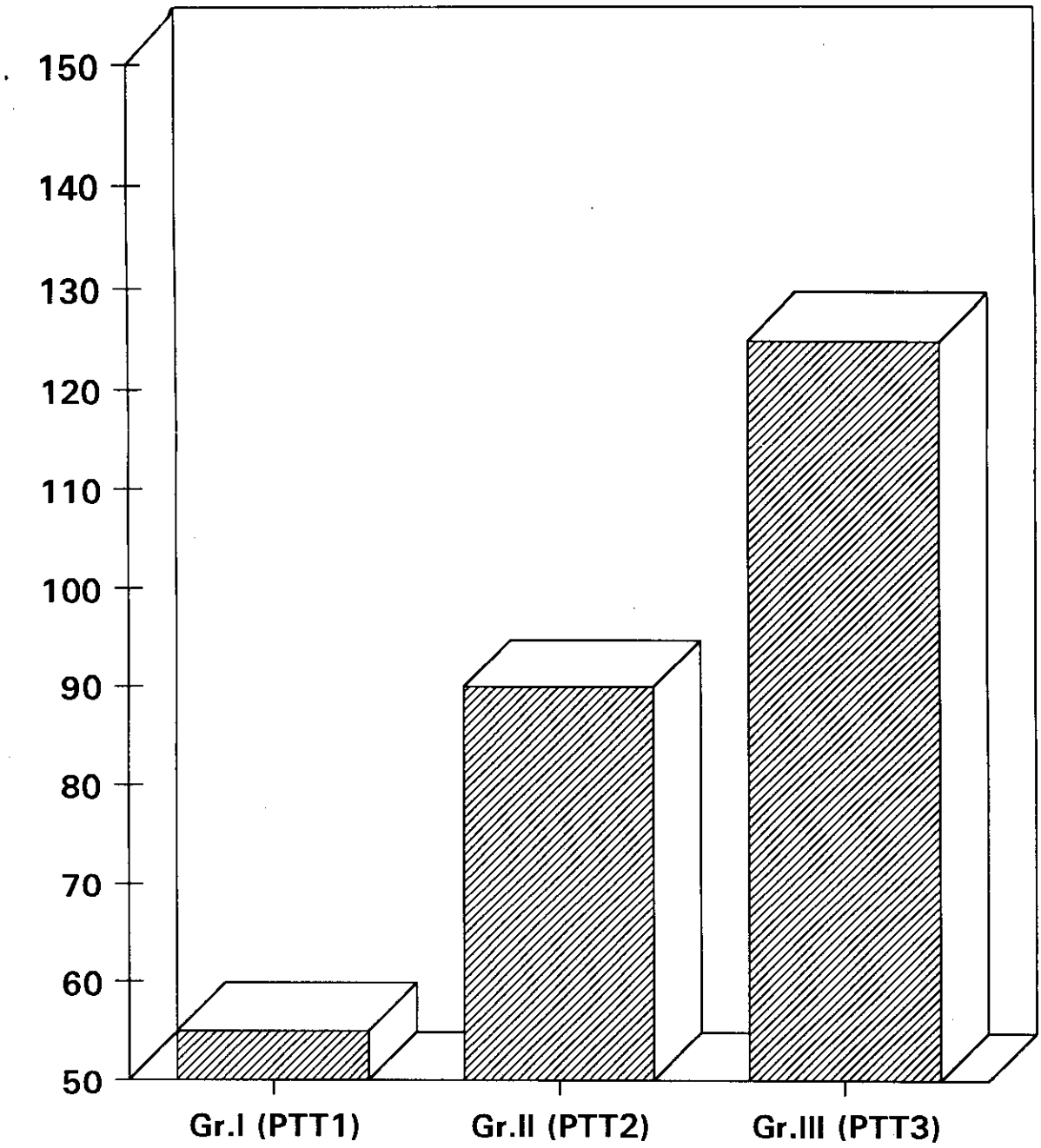

Fig. 9 : Partial thromboplastin time of neonetes.