



Experimental Pathological Study of Cell Phone's Harmful Effect on Blood, BP and Heart Rate with Its Protection by Natural Electromagnetic seed Rudraksha

Subhashish Tripathy^{*1}, Priyanka Dixit², Pragya Seth³

1.Faculty of Pharmaceutical Science, Maharana Pratap college of Pharmacy, Kanpur, UP, India

ABSTRACT

Today time is the time of digital technology .people accomplished many wonderful things when they get themselves connected to each other and it mostly happens due to the use of mobile phone .but excessive use of mobile phone can affect our health by damaging our body immune system, blood particle and its density, deformability of red blood cell, reproductive system, brain cell, changes neuronal activity .Radio frequency electromagnetic fields (RFEMF) produced by mobile phone is lethal to body because 70% of human body is made of water and due to watery composition of our body the radiation is absorbed in human body and sometime also cause cancer. But this can be protected partially by natural electromagnetic bead known as Rudraksha. Rudraksha are nothing but the seeds of the plant *Elaeocarpus Ganitrus* which is famous for its medicinal property from the ancient time. It is proven in modern scientific lab that this seed have definite electromagnetic property. In the present experimental study attempt has been made to show natural prevention technique of harmful radiations of mobile phone by the help of *Elaeocarpus Ganitrus* seed Rudraksha.

Keywords: Rudraksha, Mobile phone, BP, Heart Rate, RFEMF, Electromagnetic Property

*Corresponding Author Email: subhashishpharma@gmail.com

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INTRODUCTION

Mobile phone technology is based on transmission of microwaves with frequency between 450 and 1800 MHz and presently more than 60 million mobile phone user present worlds wide. When biological systems are exposed to such kind of non-ionizing radiation energy always transfers to their biological system. Mobile phone user regularly complains subjective symptom like headache, feeling of discomfort, warmth on the ear, nausea tension and anxiety¹⁻². Experiment conducted on young laboratory found that RF from mobile phone can significantly open the BBB Blood Brain Barrier and causes leakages of albumin from blood vessels in inappropriate location. Leakage of cation in to the cytosol. Children are more vulnerable than adult because smaller head and brain size, thinner cranial bones and skin, more elastic ears, lower blood cell volume also greater conductivity of nerve cells and the energy penetrates more deeply. Studies have shown that weak electromagnetic fields remove calcium ions bound to the membranes of living cells, making them more likely to tear, develop temporary pores and leak³⁻⁵. Radio frequency electromotive force affects the function of cell of human body, brain cell, and heart decrease hemoglobin count imbalance in the circulatory system changes also neuronal activity changes⁶⁻⁷. On the other hand *Elaeocarpus Ganitrus* Seed (*Rudraksha*) is famous in Ayurveda, Hinduism and Buddhism for Antiageing property, mental concentration, activating body seven energy wheel. People used to wear *Rudraksha* beads for mediation and opening the third eye of human body⁸⁻⁹. This Plant beads possesses electromagnetic property and gives medicinal value due to its electromagnetic impulse. Wearing it affects the body and performs healing of various diseases due to its electromagnetic impulse. As per Ayurvedic system of medicine, wearing *Rudraksha* beads relieves strain, insomnia, anxiety, lack of concentration, depression, palpitation, hypertension, rheumatism, infertility and asthma .and has also anti-aging effect¹⁰⁻¹¹. According to mukhi or natural grooves present in *Elaeocarpus* beads it possesses different type of pharmacological effects in our body. In most biological studies undertaken, extracts of *Elaeocarpus ganitrus* exhibited wide range of pharmacological activities and are identified as active against specific biological targets during large scale screening of multiple plant extracts. Literature reports are available on various pharmacological activities which include analgesic and anti-inflammatory, CNS activities, typical behavioral actions, sedative, tranquillizing, hypnosis potentiating, antidepressant, antiasthmatic, anti-diabetic, cardio stimulation, antihypertensive, anticonvulsant¹²⁻¹⁴, etc. In every human being heart bit and body structure is different from other. Our body metabolism depends on our anabolism and

catabolism. When body catabolism dominates over body anabolism then toxins and harmful metabolite accumulate in cell and aging start which weaken our body defense mechanism. Immune system can be determine by WBC or leukocyte count. Leukocyte cells involved in protecting our body against infectious disease and foreign invader. There is several type of WBC like Lymphocytes, monocytes, Granulocytes, neutrophils, Eosinophils, basophils etc use for different type of body defense mechanism. Complete blood count report reveals our blood composition and health status of human body¹⁶⁻¹⁷. Total hemoglobin, Total Leucocytes count (TLC), Diff Leucocytes count (DLC), RBC, Platelet and other stuff of human body¹⁸⁻¹⁹. Similarly during BP and heart rate measurement we can figure out health status and working condition of heart. Therefore the objective of present pathological study is to check the RBC, WBC, Hemoglobin, Platelet count by CBC pathological study and BP Heart rate study to check the health condition of heart of various people expose to mobile phone radiation its protection by Rudraksha.

MATERIALS AND METHOD

This experimental study was conducted on four group of male people age 20-40 year and each group containing ten individual persons .Group-1 persons are selected from various 24/7 call centers who generally talk at least 3-5 hour daily by mobile phone and so they are very susceptible to mobile phone radiofrequency. Group-2 persons are those people generally talk maximum 10-15 min daily by mobile phone and mostly job holder of either government or private agency. Group-1 and group-2 persons never practice to wear any kind of Rudraksha bead. Group-3 persons also talk maximum 10-15 min daily like group-2 by mobile phone but they are regular wearer of Rudraksha beads. Group-4 contain person of Naga Sadhu who hardly talk by mobile phone and never deal with such kind of any electronic gazette. They Practice yoga, meditation and regular wearer of five face Rudraksha Mala²⁰⁻²¹. These are the people who are sick and tired of this materialistic world striving hard to get Moksha goes above life and death cycle. Specimen was collected by puncturing vein of arm and EDTA blood sample was store in refrigerator for pathological study on M.P.G.I Hospital pathological lab for further study. BP and heart rate of these ten People was measured by CITIZON Blood pulse monitor CH 432²² This digital automatic Citizen BP monitor displays a measurement range from 0 to 280 mmHg for pressure and 40 to 180 beats/ minute for pulse²³.

RESULTS AND DISCUSSION

Table 1: Complete Blood Count (CBC) Of Group-1

Gr- 1.S.P	Hemoglobin R.R(13.0- 16.0gm%)	TLC R.R(4000- 10000Cells/cu mm)	DLC					Platelet counts R.R(1.5-4.5 Lac/cub.m.m.)	Total RBCS Counts R.R(3.50-5.50 million/cub.m.m)
			PolymorphsR. R(50.00- 70.00)%	Lymphocyte R.R(25.00- 40.00)%	Monocyte R.R(02.00- 10.00)%	EosinophilsR .R(01.00- 06.00)%	Basophils upto 0.6%		
1	9.6	3200	56	31	11	02	00	1.23	1.91
2	8.7	3700	62	33	03	02	00	1.72	2.97
3	12.5	4500	64	23	07	05	01	2.21	2.95
4	11.7	3400	63	25	09	03	00	2.11	2.72
5	12.0	3800	57	33	07	03	00	1.93	3.14
6	9.7	5300	58	31	08	03	00	2.15	2.91
7	9.8	2700	62	27	07	04	00	2.67	3.47
8	12.8	4100	55	37	06	02	00	3.89	3.68
9	13.9	3600	66	23	07	04	00	3.71	4.62
10	13.3	4300	69	23	05	03	00	3.88	3.56

Gr-1.S.P = Group-1 Sample person

R.R= Ref. Range

TLC=Total leukocyte count

DLC=Diff. Leukocyte Count

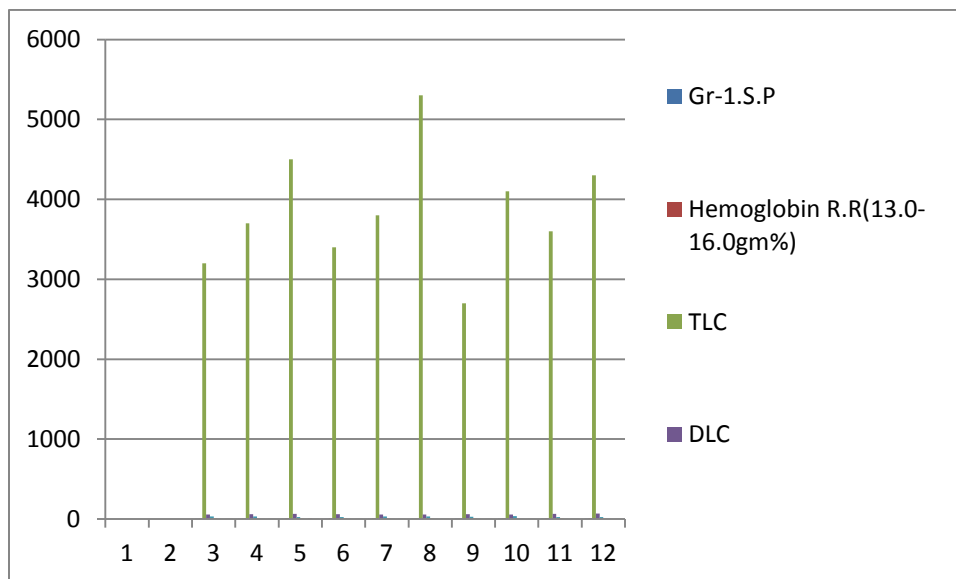


Figure 1: 2D column of Table-1

Table 2: Monitoring BP and Heart Rate of Group-1

Gr-1.S.P	SYSmmHg	DIAmHg	Pulse/min
1	139	84	76
2	132	82	73
3	142	88	77
4	145	92	74
5	143	91	73
6	151	96	74
7	105	74	71
8	149	92	72
9	113	76	69
10	156	97	70

Gr-1.S.P = Group-1 Sample person

DIA =Diastolic blood pressure

SYS=Systolic blood pressure

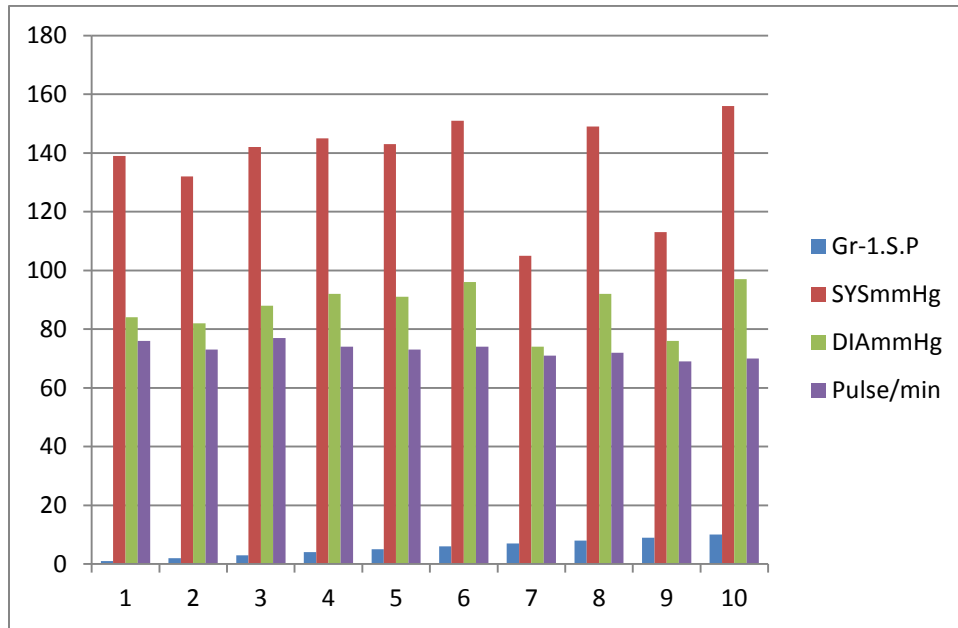


Figure 2: 2D column of Table-2

Table 3: Complete Blood Count (CBC) Of Group-2

Gr- 2.S.P	Hemoglobin R.R(13.0- 16.0gm)	TLC R.R(4000- 10000Cells/cumm)	DLC					Platelet counts R.R (1.50-4.50 Lac/cub.m.)	Total RBCS Counts R.R (04.00-06.00 million/cub.m.m)
			Polymorp hsR.R(50- 70%)	Lymphocyte R.R(25- 40)%	Monocyte R.R(02- 10)%	EosinophilsR. R(01.00- 06.00)%	Basophils upto 0.6%		
1	10.6	4200	54	33	10	02	01	2.25	3.23
2	10.2	5700	65	30	04	01	00	2.15	3.21
3	12.7	4600	67	22	07	04	00	2.28	3.24
4	11.7	3900	54	32	10	03	01	3.11	2.87
5	13.8	4500	63	27	08	02	00	3.93	4.14
6	9.7	5300	57	31	08	04	00	3.15	4.21
7	9.8	4700	65	27	05	03	00	2.47	4.17
8	12.8	4500	59	29	09	03	00	3.89	3.68
9	13.9	4100	62	24	08	06	00	3.77	4.41
10	13.3	3300	71	20	06	03	00	3.88	3.88

Gr-1.S.P = Group-1 Sample person

R.R= Ref. Range

TLC=Total leukocyte count

DLC=Diff. Leukocyte Count

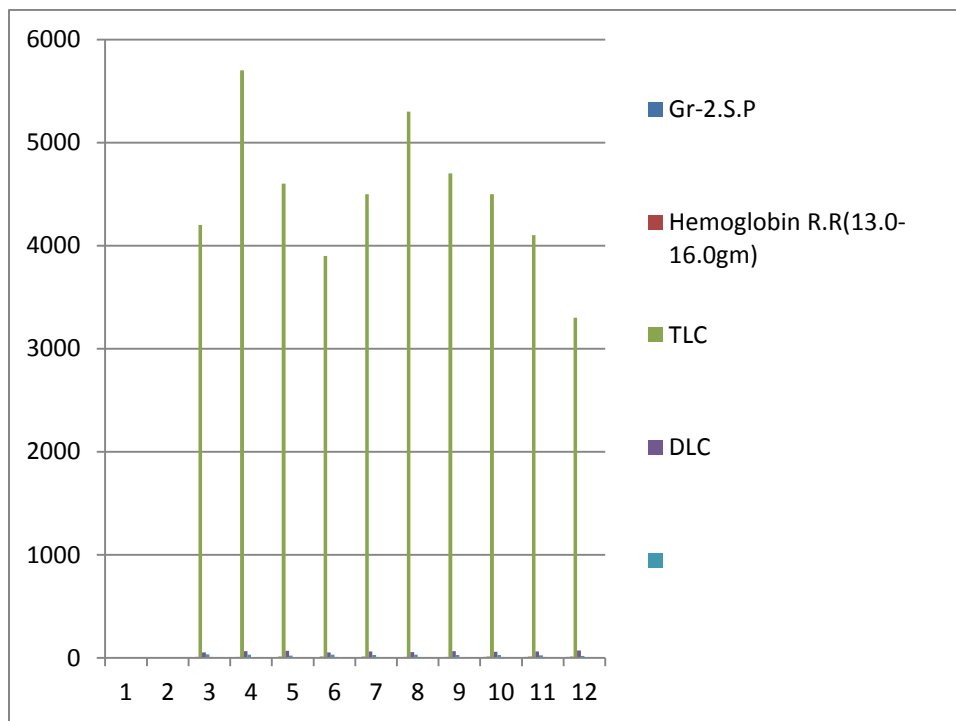


Figure 3 2D column of Table-3

Table 4: Monitoring BP and Heart Rate of Group-2

Gr-2.S.P	SYSmmHg	DIAmHg	Pulse/min
1	135	84	70
2	122	81	74
3	118	69	71
4	125	76	74
5	129	85	68
6	119	76	72
7	123	75	75
8	132	87	76
9	152	96	72
10	106	71	72

Gr-1.S.P = Group-1 Sample person

R.R= Ref.Range

TLC=Total leukocyte count

DLC=Diff. Leukocyte Count

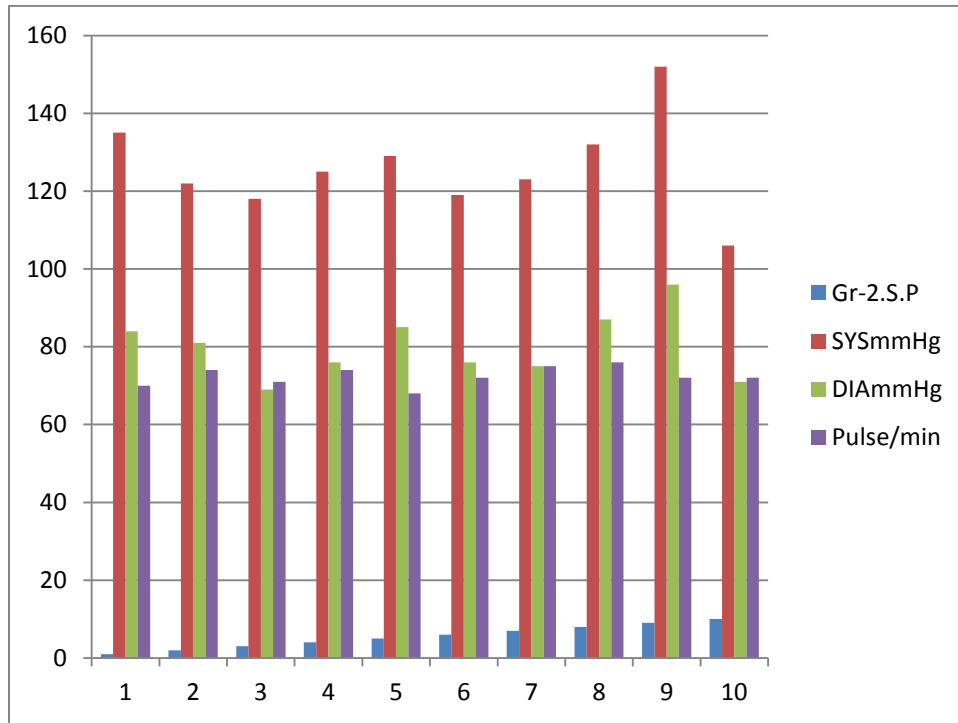


Figure 4 2D column of Table-4

Table 5: Complete Blood Count (CBC) Of Group-3

Gr- 3.S. P	Hemoglo bin R.R(13.0- 16.0gm%)	TLC R.R(4000- 10000Cells/cu mm)	DLC					Platelet counts R.R(1.5-4.5 Lac/cub.m. m.)	Total RBCS Counts R.R(3.50- 5.50 milion/cub.m .m)
			PolymorphsR.R(5 0.00-70.00)%	Lymphoc yte R.R(25.00 -40.00)%	Monocy te R.R(02. 00- 10.00)%	EosinophilsR.R(0 1.00-06.00)%	Basoph ils upto 0.6%		
1	12.3	4200	51	35	10	03	01	1.23	3.91
2	14.2	8700	62	33	03	02	00	1.72	3.48
3	13.5	7600	64	23	07	05	01	2.21	3.65
4	14.7	6300	63	25	09	03	00	2.11	3.22
5	14.0	5500	57	33	06	03	01	1.93	4.14
6	13.6	5300	58	30	08	04	00	2.15	3.31
7	13.4	5700	62	27	07	04	00	2.67	3.47
8	12.8	4500	55	37	06	02	00	3.89	3.88
9	13.9	5600	66	23	08	03	00	3.71	3.92
10	14.3	8300	68	24	05	03	00	3.88	4.56

Gr-3.S.P = Group-3Sample person

R.R= Ref.Range

TLC=Total leukocyte count

DLC=Diff. Leukocyte Count

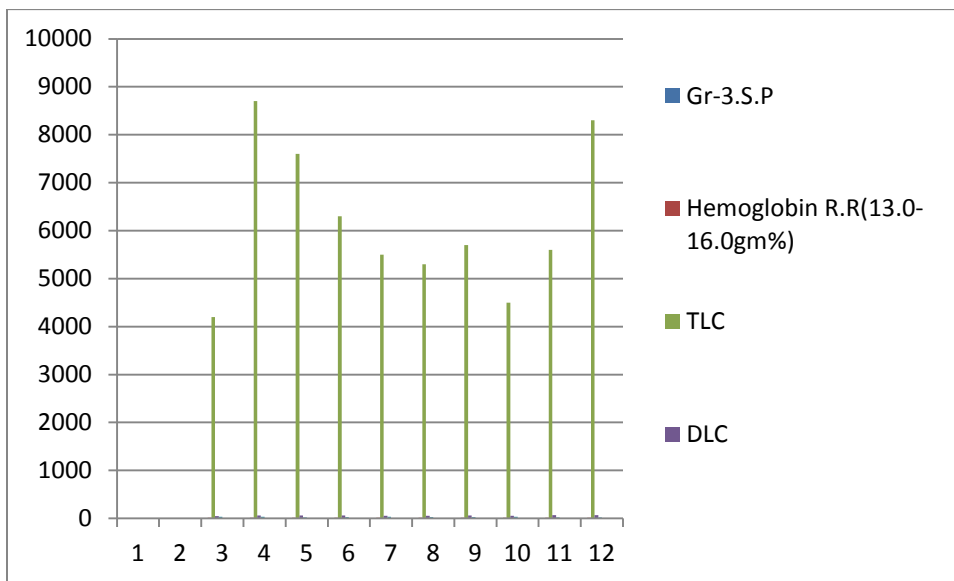


Figure 5 2D column of Table-5

Table 6: Monitoring BP and Heart Rate of Group-3

Gr-3.S.P	SYSmmHg	DIImmHg	Pulse/min
1	115	74	70
2	123	84	72
3	109	72	73
4	115	73	74
5	106	78	75
6	115	79	69
7	133	81	76
8	105	73	69
9	108	70	72
10	113	76	71

Gr-3.S.P = Group-3 Sample person

R.R= Ref.Range

TLC=Total leukocyte count

DLC=Diff. Leukocyte Count

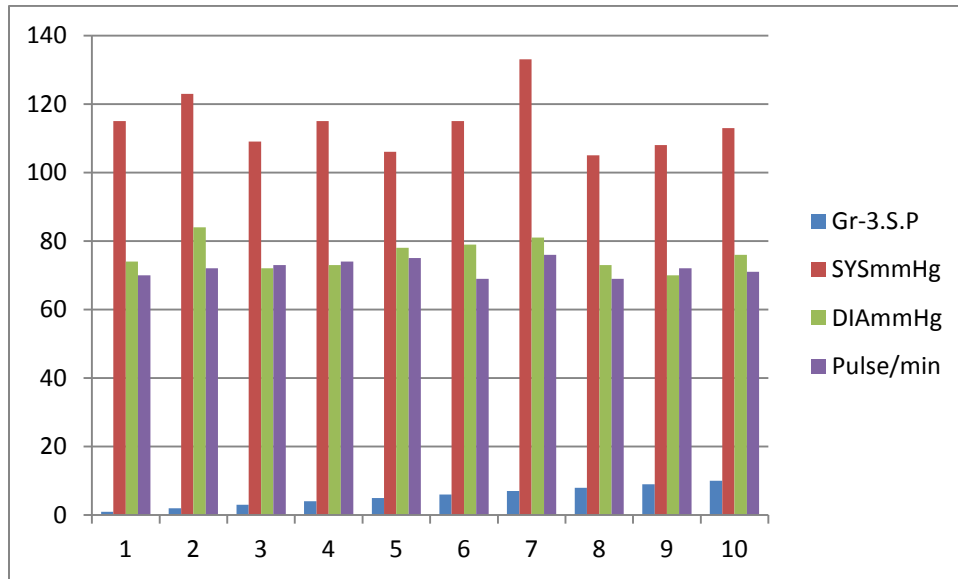


Figure 6 2D column of Table-6

Table 7: Complete Blood Count (CBC) Of Group-4

Gr-4.S.P	Hemoglobin R.R(13.0-16.0gm%)	TLC R.R(4000-10000Cells/cu mm)	DLC				Platelet counts R.R(1.5-4.5 Lac/cub.m.m.)	Total RBCS Counts R.R(3.50-5.50 milion/cub.m.m)	
			Polymorphs R.R(50.00-70.00)%	Lymphocyte R.R(25.00-40.00)%	Monocyte R.R(02.00-10.00)%	Eosinophils R.R(01.00-06.00)%			Basophils upto 0.6%
1	13.8	6500	53	32	10	05	00	1.23	3.92
2	14.5	7200	57	33	07	03	00	1.72	3.67
3	14.3	7700	64	23	08	05	00	2.21	3.61
4	14.5	8300	65	23	09	03	00	2.11	4.32
5	15.1	5500	61	31	05	03	00	1.93	4.14
6	13.7	7200	57	30	08	05	00	2.15	4.31
7	14.2	6700	61	28	07	04	00	2.67	4.47
8	14.8	6900	56	36	06	02	00	3.89	4.18
9	13.7	6800	68	21	08	03	00	3.71	3.92
10	14.6	8300	67	24	06	03	00	3.88	4.76

Gr-4.S.P = Group-4Sample person

R.R= Ref.Range

TLC=Total leukocyte count

DLC=Diff. Leukocyte Count

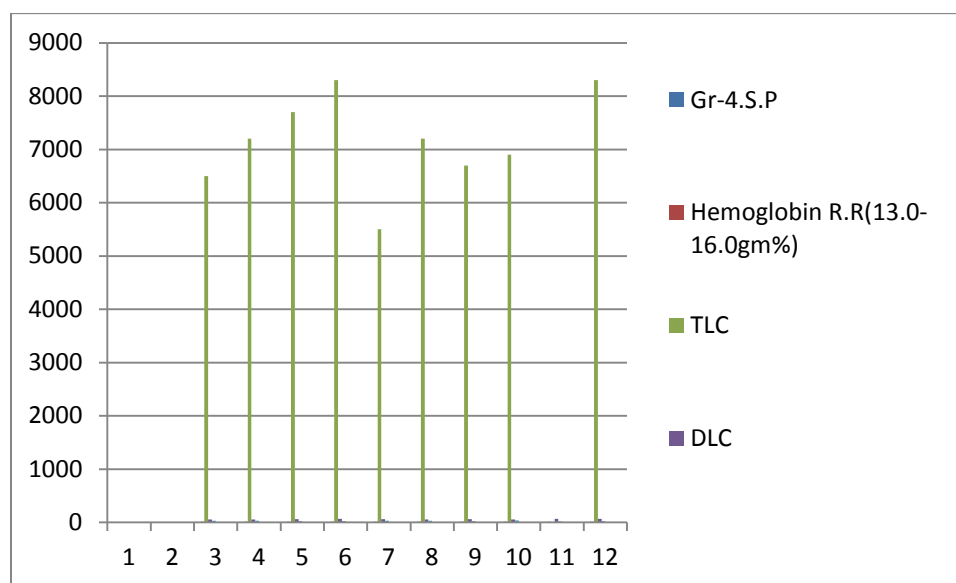


Figure 7: 2D column of Table-7

Table 8: Monitoring BP and Heart Rate of Group-8

Gr-4.S.P	SYSmmHg	DIImmHg	Pulse/min
1	108	72	67
2	106	73	68
3	109	78	70
4	114	75	66
5	104	71	62
6	115	79	69
7	103	71	56
8	104	78	60
9	111	73	64
10	113	69	61

Gr-3.S.P = Group-3 Sample person

R.R= Ref.Range

TLC=Total leukocyte count

DLC=Diff. Leukocyte Count

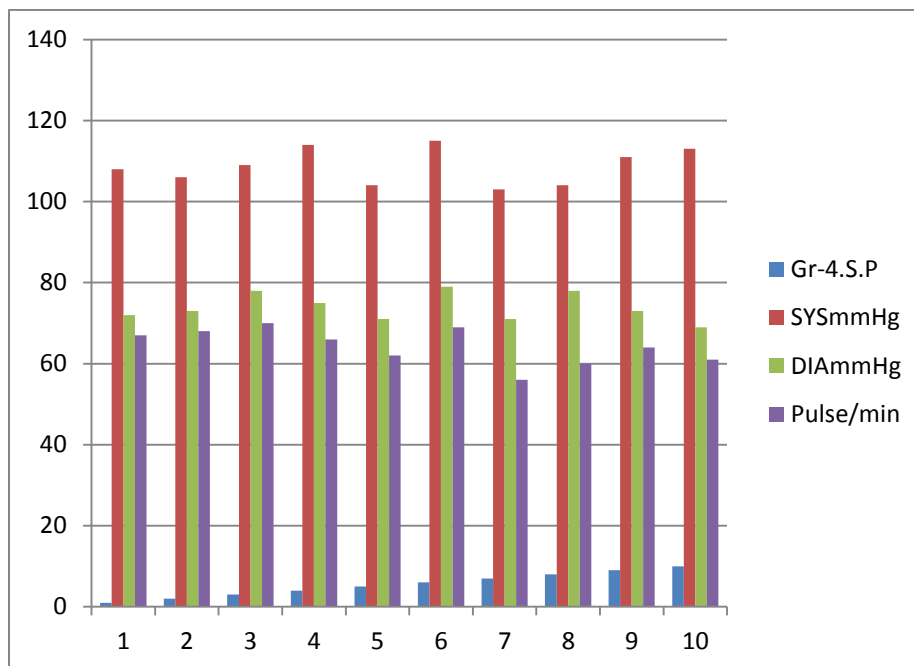


Figure 8: 2D column of Table-8

DISCUSSION

Since the ancient time mankind have been striving hard for sound health and peace of mind, but due to modern life style polluted fruits and vegetables, stress and anxiety, lack of physical exercise and environment pollution we are far from achieving our ultimate goal of sound health. Despite such type of health problems Mother Nature has the potential to provide us all type of foolproof solutions for our health problems. The nature remains as the potential source of organic structures of unparalleled diversity and *Elaeocarpus ganitrus* beads is one of the amazing plant products which heals various type of disease due to its electromagnetic property. When a person is exposed to around 100REMS or long time exposure to mobile phone the bloods lymphocyte count reduced and person's immune system become weak day by day. Exposed person's circulatory system, blood brain barrier, brain neurons number, hemoglobin count reduced Heart BP become disturb in human body. In the above pathological experiment it is shown that the group-1 persons who talk more than 3-5 hour daily show shocking pathological result. Hemoglobin content was below normal range 13.0-16.0gm% in most of cases. In CBC report show that total leukocyte count was not satisfactory in Group-1 not a single person in group-1 TLC value was more than 5000cells/cumm. Pallet and RBC count was also less than normal value as shown in table-1. Experiment done for group-1 blood pressure and pulse rate measurement by CITIZON Blood pulse monitor CH 432 show that maximum person from group-1 was suffering from high BP and pulse rate was more than average 72 Pulse/min. Systolic

blood pressure was more than more than 120 and diastolic blood pressure was more than 80 in table-2. In Table-3 and table-4 pathological report show that Group-2 people were also suffering from low hemoglobin, leukocyte and RBC content and BP was pre high range but condition of group-2 persons was slightly better than Group-1. Group-3 and group-4 pathological report as shown in Table-5, Table-6, Table-7, Table-8 shown person were healthy except few occasion in group-3. The Group-4 people were super healthy amazing result was produced when we check heart rate. Pulse rate was below 72 Pulse/min in every occasion like well trained athlete.

CONCLUSION

From Above pathological experiment we found that mobile phone radiation is harm full to human body affecting blood density, hemoglobin. RBC and WBC and also cause high BP and abnormal heart rate as shown by pathological experiment of Group-1 and Group-2 people. Like Group-1 people who talk regularly 3-5 hour minimum by mobile phone daily are very susceptible to its harmful effect of radiation But when people wear Rudraksha bead like ornament touching skin of human body due to its positive electromagnetic property it cut off the harm full effect of mobile phones radiation and further scientific study is necessary to show the procedure how the plant bead is giving protection from Radio frequency electromagnetic fields (RFEMF) produced by mobile phone as it produced in Group-3 and Group-4 Person. This Rudraksha bead when people wear practicing yoga and meditation it also gives amazing result and person's heart rate become less than normal value like well train athlete do.

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