

CHAPTER 23

ROUTINE HAEMATOLOGICAL AND OTHER INVESTIGATIONS

The results of the routine haematological and other investigations are presented in a tabular form in the following table.

The comparative haematological responses in the first pair of each "Treatment-group" are presented photographically.

CALCULATED INDIVIDUAL HAEMATOLOGICAL RESPONSE

Separate tables are given below to compare each type of haematological response as obtained in the two series. These include :

1. Gram percent rise of Haemoglobin per Week.
2. Percentage rise of Haemoglobin per Day
3. Percentage utilisation of Iron
4. R.B.C. rise per Week
5. Colour Index rise per Week
6. P.C.V. rise Per Week.
7. M.C.V. rise per Week
8. M.C.H. Rise per Week
9. M.C.H.C. rise per Week
10. Reticulocyte Response

TABLE NO. 25

Gm% RISE OF HAEMOGLOBIN PER WEEK
(All values of Hb in gm %)

Fe - S (Series A)					Fe - F (Series B)				
Case No.	Initial	Final	Difference	Gm% Rise per week	Case No.	Initial	Final	Difference	Gm% Rise per week
1	3.04	6.52	3.48	1.160	2	3.04	5.36	2.32	0.773
3	3.04	5.80	2.76	0.920	4	3.04	5.22	2.18	0.727
5	3.19	6.52	3.33	2.110	6	3.19	5.07	1.88	0.627
7	3.48	7.54	4.06	1.353	8	3.48	6.09	2.61	0.870
9	3.62	8.26	4.64	1.547	10	3.62	5.51	1.89	0.630
11	3.77	7.68	3.91	1.303	12	3.77	5.94	2.17	0.723
13	4.06	8.12	4.06	1.353	14	4.06	6.81	2.75	0.917
15	4.20	8.41	4.21	1.403	16	4.20	6.67	2.47	0.823
17	4.35	6.81	2.46	0.820	18	4.35	5.94	1.59	0.530
19	4.49	8.84	4.35	1.450	20	4.49	6.38	1.89	0.630
21	4.64	6.81	2.17	0.723	22	4.64	5.36	0.72	0.240
23	4.78	9.42	4.64	1.547	24	4.78	7.54	2.76	0.920
25	5.07	9.42	4.35	1.450	26	5.07	7.54	2.47	0.823
27	5.07	9.28	4.21	1.403	28	5.07	6.81	1.74	0.580
29	5.22	7.83	2.61	0.870	30	5.22	7.97	2.75	0.917
31	5.51	8.99	3.48	1.160	32	5.51	8.26	2.75	0.917
33	5.65	9.71	4.06	1.353	34	5.65	7.39	1.74	0.580
35	5.80	9.42	3.62	1.207	36	5.80	6.52	0.72	0.240
37	6.09	8.26	2.17	0.723	38	6.09	6.81	0.72	0.240
39	6.09	10.00	3.91	1.303	40	6.09	7.97	1.88	0.627
Average				1.207	Average				0.666

TABLE NO. 26

PERCENTAGE RISE OF HAEMOGLOBIN PER DAY
(All values of Hb in percentage)

Fe - S (Series A)					Fe - F (Series B)				
Case No.	Initial	Final	Difference	% Rise per day	Case No.	Initial	Final	Difference	% Rise per day
1	21	45	24	1.343	2	21	37	16	0.762
3	21	40	19	0.905	4	21	36	15	0.714
5	22	45	23	1.095	6	22	35	13	0.619
7	24	52	28	1.333	8	24	42	18	0.857
9	25	57	32	1.524	10	25	38	13	0.619
11	26	53	27	1.286	12	26	41	15	0.714
13	28	56	28	1.333	14	28	47	19	0.905
15	29	58	29	1.381	16	29	46	17	0.809
17	30	47	17	0.809	18	30	41	11	0.524
19	31	61	30	1.429	20	31	44	13	0.619
21	32	47	15	0.714	22	32	37	5	0.238
23	33	65	32	1.524	24	33	52	19	0.905
25	35	65	30	1.429	26	35	52	17	0.809
27	35	64	29	1.381	28	35	47	12	0.571
29	36	54	18	0.857	30	36	55	19	0.906
31	38	62	24	2.143	32	38	57	19	0.905
33	39	67	28	1.333	34	39	51	12	0.571
35	40	65	25	1.190	36	40	45	5	0.238
37	42	57	15	0.714	38	42	47	5	0.238
39	42	69	27	1.286	40	42	55	13	0.619
Average				1.290	Average				0.657

TABLE NO. 27

PERCENTAGE UTILIZATION OF IRON

Fe - S (Series A)				Fe - F (Series B)			
Case No.	Total Hb rise in gm during therapy	Total amt. of E.I. in gm. given during therapy	Percent tage utilization	Case No.	Total Hb rise in gm during therapy	Total amt. of E.I. in gm. given during therapy	Percent tage utilization
1	3.48	3.78	15.19	2	2.32	3.78	10.12
2	2.76	3.78	12.04	4	2.18	3.78	9.515
5	3.33	3.78	14.53	6	1.88	3.78	8.206
7	4.06	3.78	17.72	8	2.61	3.78	11.39
9	4.64	3.78	20.25	10	1.89	3.78	8.250
11	3.91	3.78	17.06	12	2.17	3.78	9.472
13	4.06	3.78	17.72	14	2.75	3.78	12.00
15	4.21	3.78	18.37	16	2.47	3.78	10.78
17	2.46	3.78	10.73	18	1.59	3.78	6.940
19	4.35	3.78	18.98	20	1.89	3.78	8.250
21	2.17	3.78	9.472	22	0.72	3.78	3.142
23	4.64	3.78	20.25	24	2.76	3.78	12.04
25	4.35	3.78	18.98	26	2.47	3.78	10.78
27	4.21	3.78	18.37	28	1.74	3.78	7.595
29	2.61	3.98	11.39	30	2.75	3.78	12.00
31	3.48	3.78	15.19	32	2.75	3.78	12.00
33	4.06	3.78	17.72	34	1.74	3.78	7.595
35	3.62	3.78	15.80	36	00.72	3.78	3.142
37	2.17	3.78	9.472	38	0.72	3.78	3.142
39	3.91	3.78	17.06	40	1.88	3.78	8.206
Average			15.810	Average			8.730

TABLE NO. 28

R.B.C. RISE PER WEEK
(All values in m./c.m.m.)

Fe - S (Series A)					Fe - F (Series B)				
Case No.	Initial	Final	Difference	R.B.C. Rise per week	Case No.	Initial	Final	Difference	R.B.C. Rise per week
1	2.68	3.15	0.47	0.157	2	2.37	2.85	0.48	0.160
3	2.38	2.66	0.28	0.093	4	2.54	2.80	0.26	0.087
5	2.54	3.03	0.49	0.163	6	2.50	2.80	0.30	0.100
7	2.81	3.51	0.70	0.233	8	2.68	3.10	0.42	0.140
9	2.32	3.20	0.88	0.293	10	2.74	3.22	0.48	0.160
11	2.39	3.00	0.61	0.203	12	2.77	3.00	0.23	0.077
13	2.96	3.73	0.77	0.257	14	3.14	3.30	0.16	0.053
15	3.17	3.54	0.37	0.123	16	2.88	3.10	0.22	0.073
17	3.26	3.50	0.24	0.080	18	2.76	3.10	0.34	0.113
19	2.84	3.45	0.61	0.203	20	2.88	3.21	0.33	0.110
21	3.12	3.48	0.36	0.120	22	3.02	3.14	0.12	0.040
23	3.38	4.05	0.67	0.223	24	3.42	3.80	0.38	0.127
25	3.08	3.60	0.52	0.173	26	2.97	3.39	0.42	0.140
27	3.76	4.05	0.29	0.097	28	3.32	3.48	0.16	0.053
29	3.12	3.40	0.28	0.093	30	3.20	3.81	0.61	0.203
31	3.40	3.70	0.30	0.100	32	3.66	4.01	0.35	0.117
33	3.80	4.00	0.20	0.067	34	4.08	4.10	0.02	0.007
35	3.50	3.81	0.31	0.103	36	3.75	3.81	0.06	0.020
37	3.21	3.62	0.41	0.137	38	3.26	3.44	0.18	0.060
39	3.76	4.15	0.39	0.130	40	3.58	3.86	0.28	0.093
Average				0.152	Average				0.096

TABLE NO. 29

RISE IN COLOUR INDEX PER WEEK
(All values in percentage)

Fe - S (Series A)					Fe - F (Series B)				
Case No.	Initial	Final	Difference	Rise in C.I./wk	Case No.	Initial	Final	Difference	Rise in C.I./wk.
1	.3780	.6900	.3120	.1040	2	.4275	.6268	.1993	.0664
3	.4260	.7260	.3000	.1000	4	.4000	.6310	.2310	.0770
5	.3985	.7165	.3180	.1060	6	.4250	.6035	.1785	.0595
7	.4452	.7153	.2701	.0900	8	.4323	.6548	.2220	.0740
9	.5200	.8604	.3403	.1135	10	.4400	.5700	.1300	.0433
11	.5255	.8532	.3277	.1092	12	.4535	.6600	.2065	.0688
13	.4567	.7256	.2689	.0896	14	.4318	.6878	.2560	.0853
15	.4425	.7915	.3490	.1163	16	.5000	.7160	.2160	.0720
17	.4450	.6500	.2050	.0683	18	.5275	.6328	.1053	.0351
19	.5269	.8540	.3271	.1090	20	.5196	.6635	.1439	.0480
21	.4950	.6550	.1600	.0533	22	.5126	.5700	.0575	.0192
23	.4950	.7750	.2800	.0933	24	.4660	.6625	.1965	.0655
25	.5496	.8722	.3226	.1075	26	.5465	.7413	.1948	.0649
27	.4500	.7660	.3160	.1053	28	.5110	.6525	.1415	.0472
29	.5575	.7695	.2120	.0707	30	.5450	.6980	.1530	.0510
31	.5401	.8099	.2698	.0899	32	.5000	.6866	.1866	.0622
33	.4960	.8125	.3165	.1055	34	.4625	.6000	.1375	.0458
35	.5525	.8260	.2735	.0912	36	.5160	.5700	.0540	.0180
37	.6222	.7605	.1383	.0461	38	.6226	.6591	.0365	.0122
39	.5418	.8050	.2632	.0877	40	.5660	.7060	.1400	.0467
Average				.0928	Average				.0531

TABLE NO. 30

P.C.V. RISE PER WEEK
(All values in percentage)

Fe - S (Series A)					Fe - F (Series B)				
Case No.	Initial	Final	Difference	P.C.V. Rise per week.	Case No.	Initial	Final	Difference	P.C.V. Rise per Week
1	17	27	10	3.333	2	16	23	7	2.333
3	17	24	7	2.333	4	18	25	7	2.333
5	18	27	9	3.000	6	17	23	6	2.000
7	19	28	9	3.000	8	18	24	6	2.000
9	16	27	11	3.667	10	18	24	6	2.000
11	17	25	8	2.667	12	20	25	5	1.667
13	21	30	9	3.000	14	22	29	7	2.333
15	20	28	8	2.667	16	20	25	5	1.667
17	23	28	5	1.667	18	19	24	5	1.667
19	22	31	9	3.000	20	22	26	4	1.333
21	24	28	4	1.333	22	23	25	2	0.667
23	25	34	9	3.000	24	26	33	7	2.333
25	25	32	7	2.333	26	24	30	6	2.000
27	26	35	9	3.000	28	24	29	5	1.667
29	25	31	6	2.000	30	25	32	7	2.333
31	25	32	7	2.333	32	27	34	7	2.333
33	27	36	9	3.000	34	26	30	4	1.333
35	26	35	9	3.000	36	27	30	3	1.000
37	26	31	5	1.667	38	27	29	2	0.667
39	27	34	7	2.333	40	25	29	4	1.333
Average				2.616	Average				1.749

TABLE NO. 31

M.C.V. RISE PER WEEK
(All values in c u)

Fe - S (Series A)					:	Fe - F (Series B)				
Case No.	Ini- tial	Final	Diffe- rence	M.C.V Rise per wk	Case No.	Ini- tial	Final	Diffe- rence	M.C.V. Rise per wk	
1	63.54	85.72	22.18	7.393	2	67.62	80.70	13.08	4.360	
3	71.50	90.25	18.75	6.250	4	71.00	89.50	18.50	6.167	
5	70.82	89.00	18.18	6.060	6	68.25	82.15	13.90	4.633	
7	67.61	79.77	12.16	4.053	8	67.16	77.14	10.25	3.417	
9	69.15	88.00	18.85	6.283	10	65.75	74.50	8.75	2.917	
11	71.50	83.33	11.83	3.943	12	72.25	83.25	11.00	3.667	
13	70.94	80.45	9.510	3.170	14	70.06	87.87	17.81	5.937	
15	63.09	79.15	16.06	5.353	16	69.50	80.60	11.10	3.700	
17	70.50	80.00	9.500	3.167	18	68.92	77.50	8.58	2.860	
19	77.36	90.04	12.68	4.227	20	76.04	80.99	4.95	1.650	
21	77.00	80.40	3.400	1.133	22	76.25	79.75	3.50	1.167	
23	74.00	84.00	10.00	3.333	24	76.00	87.00	11.00	3.667	
25	81.16	88.88	7.720	2.573	26	80.80	88.49	7.69	2.563	
27	69.10	86.50	17.40	5.800	28	72.25	83.00	10.75	3.583	
29	80.25	91.25	11.00	3.667	30	78.10	86.50	8.40	2.800	
31	73.53	86.49	12.96	4.320	32	76.50	85.08	8.58	2.860	
33	71.10	90.00	18.90	6.300	34	63.60	74.80	11.20	3.733	
35	74.50	91.90	17.40	5.800	36	72.15	79.00	6.85	2.283	
37	80.99	85.63	4.640	1.547	38	82.82	84.30	1.48	0.493	
39	72.00	81.19	9.190	3.063	40	70.00	75.30	5.30	1.767	
Average				4.371	Average				3.211	

TABLE NO. 32

M.C.H. RISE PER WEEK
(All values in u u g)

Fe - S (Series A)					Fe - F (Series B)				
Case No.	Initial	Final	Difference	M.C.H. Rise/wk	Case No.	Initial	Final	Difference	M.C.H. Rise/wk
1	11.32	20.70	9.380	3.127	2	12.82	18.80	5.980	1.993
3	12.85	21.80	8.950	2.983	4	11.98	18.60	6.620	2.207
5	11.96	21.55	9.590	3.197	6	12.75	18.09	5.340	1.780
7	12.37	21.24 ⁴⁵	9.080	3.027	8	12.95	19.64	6.690	2.230
9	15.60	25.81	10.21	3.403	10	13.20	17.10	3.900	1.300
11	15.78	28.44	12.66	4.220	12	13.60	19.29	5.690	1.897
13	13.71	21.76	8.050	2.683	14	12.92	20.63	7.710	2.570
15	13.23	23.80	10.57	3.523	16	15.00	21.50	6.500	2.167
17	13.33	19.50	6.170	2.057	18	15.75	19.15	3.400	1.133
19	15.87	25.62	9.750	3.250	20	15.59	19.87	4.280	1.427
21	14.85	19.55	4.700	1.567	22	15.35	17.05	1.700	0.567
23	14.45	23.25	8.800	2.933	24	13.95	19.85	5.900	1.967
25	16.53	26.17	9.640	3.213	26	17.07	22.24 ¹⁷⁰	5.170	1.723
27	13.50	22.90	9.400	3.133	28	15.32	19.58	4.260	1.420
29	16.70	23.00	6.300	2.100	30	16.30	20.90	4.600	1.533
31	16.20	24.29	8.090	2.697	32	15.05	20.61	5.560	1.853
33	14.85	24.31	9.460	3.153	34	13.82	18.00	4.180	1.393
35	16.55	24.78	8.230	2.743	36	15.50	17.15	1.650	0.550
37	18.97	22.81	3.840	1.280	38	18.67	19.36	0.690	0.230
39	16.20	24.10	7.900	2.633	40	17.00	21.20	4.200	1.400
Average				2.846	Average				1.567

TABLE NO. 33

M.C.H.C. RISE PER WEEK
(All values in percentage)

Fe - S (Series A)					Fe - F (Series B)				
Case No.	Initial	Final	Difference	M.C.H.C Rise/wk	Case No.	Initial	Final	Difference	M.C.H.C Rise/wk
1	17.85	24.14	6.29	2.097	2	19.00	23.30	4.30	1.433
3	17.90	24.20	6.30	2.100	4	16.90	20.90	4.00	1.333
5	16.89	24.15	7.26	2.420	6	18.71	22.01	3.30	1.100
7	18.31	26.93	8.62	2.873	8	19.33	25.37	6.04	2.013
9	22.00	30.59	8.59	2.863	10	20.05	22.95	2.90	0.967
11	21.75	30.72	8.97	2.990	12	18.38	23.75	5.37	1.790
13	19.33	27.06	7.73	2.577	14	18.45	23.48	5.03	1.677
15	21.00	30.00	9.00	3.000	16	22.15	26.65	4.50	1.500
17	18.98	24.30	5.32	1.773	18	22.90	24.78	1.88	0.627
19	20.40	28.51	8.11	2.703	20	20.40	24.53	4.13	1.377
21	19.35	24.30	4.95	1.650	22	20.20	21.40	1.20	0.400
23	19.10	27.60	8.50	2.833	24	18.40	22.80	4.40	1.467
25	20.20	29.68	9.48	3.160	26	21.12	25.13	4.01	1.337
27	19.54	26.50	6.96	2.320	28	21.10	23.50	2.40	0.800
29	20.80	25.20	4.40	1.467	30	20.80	24.90	4.10	1.367
31	22.04	28.09	6.05	2.017	32	20.40	24.03	3.63	1.210
33	20.50	27.00	6.50	2.167	34	21.78	24.60	2.82	0.940
35	22.25	26.90	4.65	1.550	36	21.45	21.80	0.35	0.117
37	23.42	26.64	3.22	1.073	38	22.55	23.48	0.93	0.310
39	22.55	29.41	6.86	2.287	40	24.35	27.50	3.15	1.050
Average				2.296	Average				1.140

TABLE NO. 34

RETICULOCYTE RESPONSE
(All values in Percentage)

Fe - S (Series A)					Fe - F (Series B)				
Case No.	Initial	Peak	Difference	Reticulocyte Response	Case No.	Initial	Peak	Difference	Reticulocyte Response
1	3.00	12.5	9.5	9.5	2	2.9	9.3	6.4	6.4
3	2.4	11.9	9.5	9.5	4	3.1	8.8	5.7	5.7
5	1.8	13.1	11.3	11.3	6	2.0	8.6	6.6	6.6
7	2.6	6.2	3.6	3.6	8	2.9	5.3	2.4	2.4
9	1.9	9.4	7.5	7.5	10	2.7	9.3	6.6	6.6
11	2.9	14.0	11.1	11.1	12	3.2	11.0	7.8	7.8
13	2.3	12.9	10.6	10.6	14	1.9	8.3	6.4	6.4
15	1.6	5.5	3.9	3.9	16	1.8	4.2	2.4	2.4
17	2.0	10.9	8.9	8.9	18	1.4	7.4	6.0	6.0
19	2.8	13.0	10.2	10.2	20	1.7	7.1	5.4	5.4
21	1.8	10.2	8.4	8.4	22	0.9	6.9	6.0	6.0
23	1.1	4.7	3.6	3.6	24	2.0	6.2	4.2	4.2
25	1.6	5.5	3.9	3.9	26	1.5	4.4	2.9	2.9
27	1.2	10.0	8.8	8.8	28	2.2	8.8	6.6	6.6
29	2.1	6.7	4.6	4.6	30	2.6	4.9	2.3	2.3
31	0.8	11.8	11.0	11.0	32	2.0	8.1	6.1	6.1
33	2.3	14.2	11.9	11.9	34	3.1	11.2	8.1	8.1
35	2.2	12.4	10.2	10.2	36	0.8	6.8	6.0	6.0
37	2.0	12.3	10.3	10.3	38	3.8	8.9	5.1	5.1
39	2.2	13.8	11.6	11.6	40	2.6	9.8	7.2	7.2
Average				8.52	Average				5.51