



## CHAPTER VIII

### ANTI-DNA IN SLE PATIENTS SERIALY STUDIED AFTER TREATMENT

64 sera samples from 8 patients satisfied the ARA Criteria (active) for the classification of SLE were tested. All cases have been studied serially over a period of 2 weeks to 6 months. Serum samples were taken at 2 weekly and 1 monthly intervals. Antibodies to DNA were measured using the present ELISA technic. The same 64 sera specimens from SLE patients were also determined for  $C_3'$  levels.

The results of Anti-DNA and  $C_3'$  levels were shown in Table 11 and 12 respectively. From Table 11, the mean value of the highest reciprocal Anti-DNA titer before treatment was 430.53 and the mean value of the lowest titer at 6 months was 12.33. Anti-DNA titers were significantly decreased after treatment at various times (Table 13). Figure 7 shows mean and 95% confidence limits of Anti-DNA titers and complement levels at various times. From table 13, Anti-DNA titers were significantly decreased from the first day of treatment ( $P < 0.01$  or  $0.01 < P < 0.05$ ) and the titers became normal in 5 months after treatment ( $P > 0.05$ ).

Figure 8 shows the correlation between serum Anti-DNA titers and complement levels by using data from Table 11 and 12, it was found that there was a significant reciprocal correlation between Anti-DNA titers and complement levels ( $r = -0.8786, P < 0.01$ ).

TABLE 11 ANTI-DNA TITERS IN SLE PATIENTS SERIALY STUDIED AFTER TREATMENT

No.	before treatment	after treatment						
	1 <sup>st</sup> day (I)	2 wks. (II)	1month (III)	2months (IV)	3months (V)	4months (VI)	5months (VII)	6months (VIII)
1.	512	256	256	128	64	32	32	16
2.	512	256	128	128	32	16	16	16
3.	256	512	128	64	32	8	8	8
4.	1024	512	128	128	64	32	16	16
5.	256	128	32	32	16	8	8	8
6.	512	256	64	64	16	16	16	16
7.	1024	256	128	64	64	32	32	16
8.	128	128	64	32	32	8	8	8
Mean	430.53	255.98	98.70	69.80	34.89	15.99	14.67	12.33
± S.E.	1.29	1.20	1.25	1.23	1.23	1.25	1.23	1.17

TABLE 12  $C_3$  LEVELS (mg%) IN SLE PATIENTS SERIALLY STUDIED AFTER TREATMENT

No.	before treatment	after treatment							
	1 <sup>st</sup> day (I)	2 wks. (II)	1month (III)	2months (IV)	3months (V)	4months (VI)	5months (VII)	6months (VIII)	
1.	25	50	55	68	70	70	75	82	
2.	38	55	60	65	80	75	95	90	
3.	55	45	60	65	70	85	85	84	
4.	35	40	55	55	65	70	75	87	
5.	35	40	60	60	70	75	90	105	
6.	40	55	65	60	75	80	95	98	
7.	35	50	55	70	75	80	95	102	
8.	60	78	85	85	90	95	115	110	
Mean	40.3	51.6	61.8	66.0	74.3	78.7	90.6	94.7	
± S.E.	4.0	4.3	3.5	3.2	2.7	2.9	4.5	3.6	

TABLE 13 SUMMARY OF STATISTICAL ANALYSIS FOR CHANGES OF ANTI-DNA  
TITERS IN SLE PATIENTS IN VARIOUS TIMES AFTER TREATMENT

	I	II	III	IV	V	VI	VII
VIII	$P < 0.01$	$P < 0.01$	$P < 0.01$	$P < 0.01$	$P < 0.01$	$0.01 < P < 0.05$	$P > 0.05$
VII	$P < 0.01$	$P < 0.01$	$P < 0.01$	$P < 0.01$	$P < 0.01$	$P > 0.05$	
VI	$P < 0.01$	$P < 0.01$	$P < 0.01$	$P < 0.01$	$P < 0.01$		
V	$P < 0.01$	$P < 0.01$	$P < 0.01$	$P < 0.01$			
IV	$P < 0.01$	$P < 0.01$	$0.01 < P < 0.05$				
III	$P < 0.01$	$P < 0.01$					
II	$0.01 < P < 0.05$						

I = before treatment

II = 2 weeks after treatment

III = 1 month after treatment

IV = 2 months after treatment

V = 3 months after treatment

VI = 4 months after treatment

VII = 5 months after treatment

VIII = 6 months after treatment

N.B. This table was analysed by Randomized Blocked design and Pair t-test method.

FIGURE 7 Mean and 95% confidence limits of Anti-DNA titers at various times in SLE patients groups.

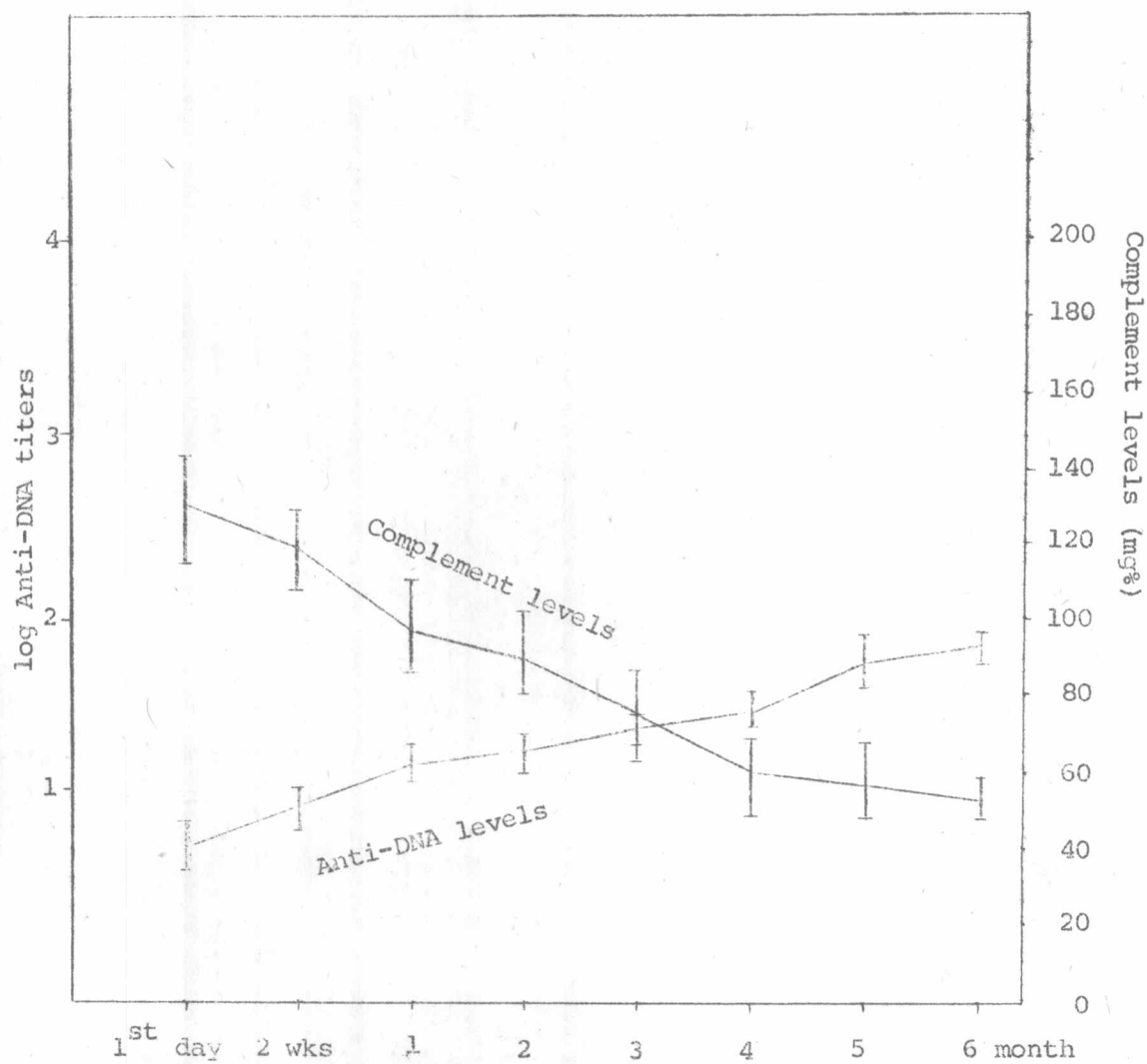


FIGURE 8 Reciprocal Correlation between levels of Anti-DNA antibodies and Complement in SLE patients.

