

Comparative test [redacted] antibody in own virus
in 3 month and 3 year sera of patient [redacted]

Virus: Gen I of 11-17-47; this was used because there was not enough of Gen II left for this test.

Sera to be tested: 3 mo serum 11-11-47
3 yr serum 6-3-50

Selection of dose of virus: 10^{-2} (final dil.)

Procedure:

a	3 mo serum:	undil.	= 1.2 cc	
b		1:4	= 0.4 cc undil. + 1.2 cc saline.	= 0.16 cc
c		1:16	= 0.4 cc 1:4 + "	"
d		1:64	= 0.4 cc 1:16 + "	" discard 0.4 cc
e	3 yr serum	undil.	= 1.2 cc	
f		1:4	= 0.4 cc undil. + 1.2 cc saline.	
g		1:16	= 0.4 cc 1:4 + "	"
h		1:64	= 0.4 cc 1:16 + "	" discard 0.4 cc.

i Saline control 1.4 cc. saline.

Virus 1:50:

1.5 cc 1:5 + 13.5 cc saline = 15 cc 1:50 (we need then 11 cc).

Add to each tube a-b 1.2 cc virus 1:50, and to i 1.4 cc.

Leave at room temp. (79°) for one hour and in refrigerator overnight.

Immediately prior to inoculation of monkeys prepare 10 fold dilutions of virus in saline from saline control tube.

10^{-2} = Virus control tube (2.8 cc)

10^{-3} = 0.3 cc 10^{-2} + 2.7 cc saline

10^{-4} = " 10^{-3} + " "

10^{-5} = " 10^{-4} + " "

Inoculate 0.5 cc into right thalamic vein of each of 4 rhesus monkeys.

preparation	dilution	Phenol	results	6-26-5
3 mo	1:64	2113 x K		0/4
1:128+?		2114 x K		
X2=1:256+?		2115 x K		
3 mo	1:16	2116 x K		
		2117 x D13	neg	0/4
		2118 x K		
		2119 x D11	negative	0/2
		2120 x K		
3 mo	1:4	2121 x K		0/4
		2122 x K		
		2123 x K		
		2124 x K		
3 mo	undil.	2125 x K		0/4
		2126 x K		
		2127 x K		
		2128 x K		

3 yr	1:64	2129 blood diarrhea. Replaced by 2099 K		0/4
1:128+?		2130 x K		
X2=1:256+?		2131 diarrhea. Replaced by 2102 K		0/4
3 yr	1:16	2132 x K		
		2133 x K		
		2134 x K		
		2135 x K		
		2136 x K		
3 yr	1:4	2137 x K		0/4
		2138 x K		
		2139 x K		
		2140 x K		
3 yr	undil.	2141 x K		0/4
		2142 x K		
		2143 x K		
		2144 x K		

10 ⁻⁵		2145 x K	neg	1/4
		2146 x K	neg	
		2147 x P10	neg	
		2148 x K	neg	
10 ⁻⁴		2149 x P6	Killed	
10 ⁻³		2150 x K	neg!	2/4
		2151 x K	neg!	
		2152 x P12	Killed	
		2153 x P1	Killed	
		2154 x P8	Killed	
		2155 x P12	Killed	
		2101 x P9	Killed	
		2095 x P6	Killed	
		2096 x P1	Killed	
		2097 x P3	Killed	
		2098 x P12	Killed	

Rh 2113

3 MONTH SERUM - 1'64

DATE	DAY	REMARKS
------	-----	---------

June 26, 1951

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

30

July 25

killed for histology.

SERUM DILUTION NEUTRALIZATION

Rh 2114

3 MONTH SERUM - 1:64

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
July 25	24	
	30	Killed for histology

SERUM DILUTION NEUTRALIZATION

Rh 2115

3 MONTH SERUM - 1.64

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
July 25	24	
	30	Arched for histology.

- SERUM DILUTION NEUTRALIZATION

Rh 2116

3 MONTH SERUM - 1.64

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 25	30	killed for histology.

SERUM DILUTION NEUTRALIZATION

Rh 2117

3 MONTH SERUM - 1/16

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	This morning dead in cage. Sections CNS in gentles.

SERUM DILUTION NEUTRALIZATION

Rh 2118

3 MONTH SERUM - 1:16

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
July 1,	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
July 13,	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	25	killed for histology

- SERUM DILUTION NEUTRALIZATION

Rh 2119

3 MONTH SERUM - 1/16

DATE	DAY	REMARKS
June 26,	0	
27	1	
28	2	
29	3	
30	4	
1	5	
2	6	
3	7	
4	8	
5	9	Looks ill, lies down. Diarrhea with blood and slime. Chloromycetin treatment, Saline i.p.
6	10	
7	11	This "morning" dead in cage. Section CNS in Zenker.

SERUM DILUTION NEUTRALIZATION

Rh 2120

3 MONTH - SERUM - 1:16

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
July 25	24	
	31	16 filed for history

- SERUM DILUTION NEUTRALIZATION

Rh 2/21

3 MONTH SERUM - 1:4

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 2 5	31	skipped for histology

SERUM DILUTION NEUTRALIZATION

Rh 2122

3 MONTH SERUM - 1:4

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 25	25	killed for histology

- SERUM DILUTION NEUTRALIZATION

Rh 2123

3 MONTH SERUM - 1:4

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 25	21	Killed for histology

- SERUM DILUTION NEUTRALIZATION

Rh 2124

3 MONTH SERUM - 1:4

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 25	31	inlet for histology

- SERUM DILUTION NEUTRALIZATION

Rh 2125

3 MONTH SERUM - UNdil.

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	25	titred for histology

- SERUM DILUTION NEUTRALIZATION

Rh 2126

3 MONTH SERUM - UNDI.

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	31	killed for histology

SERUM DILUTION NEUTRALIZATION

Rh 2127

3 MONTH SERUM - UNDI.

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	21	killed for histology

SERUM DILUTION NEUTRALIZATION

Rb 2128

3 MONTH SERUM - UNDI.

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	31	killed for histology

SERUM DILUTION NEUTRALIZATION

Rh 2099

3 YEAR SERUM - 1:64

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	25	incubated for microscopy

SERUM DILUTION NEUTRALIZATION

Rh 2130

3 YEAR SERUM - 1/64

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	25	illed for histology

Rh 2102

3 YEAR SERUM - 1/64

STANDARD B & P "NOTES"

STANDARD B & P "NOTES"

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	31	Killed for histology
		<u>Histology</u> - There is rather extensive perivascular infiltration in the medulla, especially one section, and in certain levels of spinal cord especially posterior horn + white matter. Also some meningeal infiltration + occasionally slight interstitial <u>but</u> There is no evidence of outfall of neurons or <u>root</u> changes in level of spinal cord showing infiltration changes
		Cannot call this polio

SERUM DILUTION NEUTRALIZATION

Rh 2132

3 YEAR SERUM - 1'64

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	31	Willed for histology,

- SERUM DILUTION NEUTRALIZATION

Rh 2133

3 YEAR SERUM - 1/16

DATE	DAY	REMARKS
June 26,	0	Slight diarrhea with some blood. 1 gram chloromycetin orally.
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 25	31	incubated for histology

SERUM DILUTION NEUTRALIZATION

Rh 2134

3 YEAR SERUM - 1:16

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	31	inlet for history

SERUM DILUTION NEUTRALIZATION

Rh 2135

3 YEAR SERUM - 1:16

DATE	DAY	REMARKS
June 26,	0	
27	1	
28	2	
29	3	
30	4	
1	5	
2	6	
3	7	
4	8	
July 5	9	This morning dead in cage. No diarrhoea! Sections CNS in Kenner Autopsy: No gross lesions only very meager.

- SERUM DILUTION NEUTRALIZATION

Rh 2136

3 YEAR SERUM - 1/16

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 26	31	killed for histology

- SERUM DILUTION NEUTRALIZATION

Rh 2137

3 YEAR SERUM - 1:4

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 25	30	Killed for histology.

SERUM DILUTION NEUTRALIZATION

Rh 2138

3yEAR SERUM - 1:4

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 25	30	Killed for histology.

SERUM DILUTION NEUTRALIZATION

Rb 2139

3 YEAR SERUM - 1:4

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
July 25	30	Killed for histology

SERUM DILUTION NEUTRALIZATION

Rh 2140

3 YEAR SERUM - 1:4

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
July 25	24	
	30	filled for histology

SERUM DILUTION NEUTRALIZATION

Rh 2141

3 YEAR SERUM - UNDI.

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
July 24	24	
	25	
	26	
July 24	27	
	28	rolled for antibody

— SERUM DILUTION NEUTRALIZATION

Rh 2142

3 YEAR SERUM - UNDI

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	
	27	
July 24	28	killed for histology

SERUM DILUTION NEUTRALIZATION

Rh 2143

3 YEAR SERUM - UNDI.

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	
July 24	27	
	28	Willed for histology

SERUM DILUTION NEUTRALIZATION

Rh. 2144

3 YEAR SERUM - UNdil.

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	
July 24	27	
	28	Killed for histology.

Rh 2145

CONTROL - 10-5.0

DATE	DAY	REMARKS
June 26,	0	
27	1	
28	2	
29	3	
30	4	
July 1	5	
2	6	
3	7	
4	8	
5	9	
6	10	
7	11	
8	12	
9	13	
10	14	
11	15	
12	16	
13	17	
14	18	
15	19	
16	20	
17	21	
18	22	
19	23	
20	24	
21	25	
22	26	
July 23	27	Killed for histology.

SERUM DILUTION NEUTRALIZATION

Rh 2146

CONTROL - 10-5.0

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	
July 23	26	
	27	killed for histology.

Rb 2147

CONTROL - 10-5.0

DATE	DAY	REMARKS
June 26,	0	
27	1	
28	2	
29	3	
30	4	
July 1	5	
2	6	
3	7	
4	8	
5	9	
6	10	Partial paralysis of lowers.
	11	Same
	12	Same
	13	Same.
	14	Same
	15	Same
	16	Same.
	17	Same.
	18	Same
	19	Same
	20	Same
	21	Some improvement.
	22	Still weakness of lowers.
	23	
	24	
	25	
	26	
July 23	27	Killed for histology.

- SERUM DILUTION NEUTRALIZATION

Rh 2148

CONTROL - 10-5.0

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	
July 27	27	killed for his body.

STANDARD B & P "NOIEAR"

STANDARD B & P "NOIEAR"

Rh 2149

CONTROL - $10^{-4.0}$

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	Complete paralysis of upper & lower. Lies down. Typical red face. Killed for virus.

SERUM DILUTION NEUTRALIZATION

Rh 2150

CONTROL - 10-4.0

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	
July 23	27	killed for histology

— SERUM DILUTION NEUTRALIZATION

Rh 2151

CONTROL — 10-40

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	
July 23	27	Killed for histology.

SERUM DILUTION NEUTRALIZATION

Rh 2152

CONTROL-10-4.0

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	Very nervous, weakness of limbs. Partial paralysis of both arms.
	13	Same.
	14	Worse. Killed. Sections CNS in Jenkins.

SERUM DILUTION NEUTRALIZATION

Rh 2153

CONTROL - 10-3.0

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	Total paralysis of lower & upper. Lies down. Killed for virus.

Rh 2154

CONTROL - 10-3.0

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	Paralysis of lowers. Killed for virus.

Rh 2155

CONTROL - 10-3.0

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	Weakness of lowers.
	12	Partial paralysis of left arm. Partial paralysis of lowers.
	13	Same.
	14	Same.
	15	Same.
	16	Cannot sit, lies down.
	17	Same.
	18	Prostrate. Killed. Sections CNS in zenker.

- SERUM DILUTION NEUTRALIZATION

Rh 2101

CONTROL - 10^{-3.0}

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
July 5	7	Very excited. Tremor of head.
	8	When excited definite tremor of head.
	9	Marked tremor of head. Paralysis of lowers.
	10	Same
	11	Same
	12	Paralysis more pronounced.
	13	Same.
	14	Same. Killed. Sections CNS in zenker.

Rh 2095

CONTROL - 10-2.0

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	Paralysis of lowers. Killed for virus.

— SERUM DILUTION NEUTRALIZATION

Rh 2096

CONTROL — 10-2.0

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	Lies down. Total paralysis of lowers + uppers. Killed for virus.

- SERUM DILUTION NEUTRALIZATION

Rh 2097

CONTROL - $10^{-2.0}$

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	Complete paralysis of lower + upper. Killed for virus

- SERUM DILUTION NEUTRALIZATION

Rh 2098

CONTROL - 10^{-2.0}

DATE	DAY	REMARKS
June 26,	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	Very excited.
	12	Paralysis of left deltoid & right deltoid; partial paralysis of lower.
	13	Today somewhat more pronounced.
	14	Sent.
	15	Killed for histology.

Test for Persistence of Antibody in 3 year Serum of Patient [REDACTED]

Virus - Gen II used in tests of 1948 - cumulative titer = $10^{-3.8}$
 Virus pool of 12/11/47 - vial 2. [as these ampule could not be
 neutralized, another one was chosen: GEN III - 10-18-48 20% susp. RH 421 vial 1]

Sera to be tested: { 3 month serum of 11-13-47
 { 3 year serum " 6-3-50

Selection of dose of virus: Because of uncertainty of exact PD_{50}
 of virus preparation will use
final dilution of virus at 10^{-2} .

Procedure : Mix 1.2cc of serum (or indicated dilution of it)
 with 1.2cc of virus 1:50 in saline.

For saline control prepare 3.0cc amounts
 of virus 10^{-2} ; 10^{-3} , 10^{-4} , and 10^{-5} in saline
 Leave mixtures at room temp. for 1 hour
 and overnight in refrigerator. Inoculate
 0.5cc i.d. into each of 4 monkeys
 Prepare further dilutions for titration of virus (10^{-3} , 10^{-4} , 10^{-5})
 just before inoculation

Serum	UNDILUTED	1:4	1:16	1:64
3 month of 11-13-47				
3 year Serum				
6-3-50				
	1			
	2			
	3			
	4			
SALINE CONTROL	10^{-2}	10^{-3}	10^{-4}	10^{-5}
	1			2x X
	2			X
	3			2x X
	4			X