

Comparative Test for Neutralizing Antibody vs. Own Virus

in 3-month and 3-year Sera of Patient

Virus - Gen III of 3-8-48 (vial³⁴) used for tests in 1948
Cumulative titer = $10^{-2.9}$; test of 6-13-48 - $10^{-3.5}$?

Sera to be tested - 3 month serum (11-28-47)
3 year serum

Selection of dose of virus: $10^{-1.3}$, same as that used in test of 6-13-48,
will be final dilution of virus. (160 pds.
on basis of simultaneous titration)

Procedure: Prepare following dilutions of indicated sera in saline

3 month serum - 1:16 = 0.1 cc of undil. ser. + 1.5 cc saline
1:64 = 0.4 cc of 1:16 + 1.2 cc "
1:256 = 0.4 cc of 1:64 + 1.2 cc "
+ discard 0.4 cc

3 year serum - Und. = 1.2 cc of undil. serum.
1:4 = 0.4 cc of undil. Ser + 1.2 cc saline
1:16 = 0.4 cc of 1:4 + " "
1:64 = " of 1:16 + " "
1:256 = " of 1:64 + " "
+ discard 0.4 cc.

Saline Control - 1.4 cc saline

Virus 1:10 in saline - 5.7 cc of 20% virus + 5.7 cc of saline

To each tube containing dil. serum add 1.2 cc of virus^(1:10)

To saline control tube add 1.4 cc of virus (1:10)

Leave at room temp. (24°C) for one hour
and in refrigerator overnight.

Immediately prior to inoculation of monkeys
prepare 10-fold dilutions in saline from saline control
tube as follows:

for $10^{-2.3}$ = 0.3 cc of "1.3" + 2.7 cc of saline
" $10^{-3.3}$ = " of "2.3" + " "
" $10^{-4.4}$ = " of "3.3" + " "

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

fine

Preparation	Dilution	Rhesus No	Result		
3 month Serum 28-1947	1:256	✓ 1809	† march 6 (4)	0/2	X
		✓ 1810			X
		✓ 1811			X
		✓ 1812	† march 12 (10)		X
1:256 x2 = 1:512	1:64	✓ 1813		1/3	X
		✓ 1814	† march 3 (1)		-
		✓ 1815	P14		A
		✓ 1816			X
3 year Serum (5-26-1950)	1:256	✓ 1821	P6	4/4	P
		✓ 1822	P8		A
		✓ 1823	P12		A
		✓ 1824	P9		P
1:90 x2 = 1:180	1:64	✓ 1825	† march 4 (2)	0/2	-
		✓ 1826			X
		✓ 1827			X
		✓ 1828	† march 8 (6)		X
1:16	1:16	✓ 1829		1/3	X
		✓ 1830 ^{SP}	P24		P
		✓ 1831	† march 9 (7)		X
		✓ 1832			X
1:4	1:4	✓ 1833		0/4	X
		✓ 1834 ⁷			X
		✓ 1835			X
		✓ 1836			X
Undil Dr. S. Luerman	Undil	✓ 1837		0/4	X
		✓ 1838			X
		✓ 1839			X
		✓ 1840			X
Virus CONTROL and TITRATION	4.3	✓ 1678x	P12	1/3	12
		✓ 1680x			0
		✓ 1681x			0
		✓ 1682x	P9		9
2.3, 3.3 + 4.3 dilutions made at 10:30 AM.	3.3	✓ 1699x		2/4	0
		✓ 1700x	P8		8
		✓ 1702x			0
		✓ 1841	P17		17
10 ^{-3.3}	2.3	✓ 1842		2/3	0
		✓ 1843	† march 6 (4)		0
		✓ 1844	HISTO G. POS.		24-0
		✓ 1845			NP
1:3	1:3	✓ 1846	P6	4/4	P
		✓ 1847	P7		P
		✓ 1848	P8		P
		✓ 1849	P8		P

The test was set up by mistake with the contents of vial #4 without previously centrifuging the considerable flocculent precipitate which it contained. This material was discarded and 1.6cc of the 3 year serum was unfortunately wasted.

Since enough virus was not avail. left in vial #4 to repeat the test, it was mixed with the contents of vial #3 and the pool centrifuged at @ 2000 rpm for 10 minutes. The clear supernatant liquid was used for the test and approximately 0.6cc of sediment (@ 1/1cc of liquid) was discarded. The residue of the virus was refrozen as pool of amp 3 and 4.

Sera - about 1.45cc of 3 year serum left at end of test + about as much of 3 month serum.

Mixtures otherwise prepared according to protocol left at 24°C between 5²⁰ PM and 6²⁰ PM.

INOCULATIONS - 3-2-51 - begun 9:20 AM } began with 1809 +
finished 11:10 AM } finished 1828

Rh 1824 } - exhibited spastic paralysis
+ Rh 1830 } immediately after inoculation.
Almost complete recovery at 11¹⁰ AM.

March 3rd. all animals seem to be in good condition except Nr. 1814, which is moribund at 9¹⁵ a.m. This animal shows diarrhea.

March 4th. Nr 1825 dead. (remov. diarrhea)

" 6. Nr. 1809 and 1843 dead.

" 8. Nr. 1821 and 1845 killed (paralysis). 1828 nearly dead (killed).

GEN IV. 203 and trap in volume / 1st day of pregnancy

3-10-1951 first Rh 1700-1820-1840. Used on:
Vials 1-7. Vial no 1 } 5
2 } 4-25-51 Willuse 6
3 } 7
4 }

3-11-1951 first Rh 1824-1847-1682. Vial no 1 5
2 6
3
4

3-8-1951 first Rh 1821+1845 Vial M = Used on April 10 and 11, 1951

3-16-1951 " Rh 1815+1820 Used on March 17-March 24

SERUM DILUTION NEUTRALIZATION

Rh 1809

3 MONTH SERUM - 1:256

DATE	DAY	REMARKS
March		
2	0	
3	1	
4	2	
5	3	sick, nocturnal. 6 ⁰⁰ p.m.: very sick. Blooddiarrhea.
6	4	9 ^{am} dead. CNS for hist. exam.
7	5	
8	6	
9	7	
10	8	

SERUM DILUTION NEUTRALIZATION

Rh 1810

3 MONTH SERUM - 1:256.

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	Killed. for histol. sections 2 pc. medulla, 2 x 2 pc. enlargements, 2 pc. thym. cond.

SERUM DILUTION NEUTRALIZATION

Rh 1811

3 MONTH SERUM - 1:256

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	Killed for histol sections: 2 pc medulla, 2 x 2 pc enlargements, 2 pc cord.

SERUM DILUTION NEUTRALIZATION

Rh 1812

3 MONTH SERUM - 1:256

DATE	DAY	REMARKS
March 2	0	
3	1	
4	2	
5	3	
6	4	Very sick. Blood diarrhea. 10 ³⁰ 50cc saline subcut. and 50cc 1/2% sulfa
7	5	Much better but feces blood + slime. diazine in saline intra perit. 5 p.m. ditto.
8	6	Improved. (Same therapy.)
9	7	No diarrhea.
10	8	Blood diarrhea again. Extremely weak. Possible partial paralysis of uppers + lowers. Difficult to be certain about paralysis due to generalized weakness from diarrhea. 50cc 1/2% sulfa diazine 2x daily for at least 3 days.
11	9	Same therapy
12	10	Same therapy found dead this morning. C.N.S. for hist. exam. Autopsy: there are no gross lesions. Abdomen: filled with a gelatinous, yellowish mass. Local peritonitis (hemorrhagic) on the colon and cecum. Hemorrhagic stomatitis and enteritis. A big ulcer in the cecum.

STANDARD B & P "NOTEPAR"

STANDAR

SERUM DILUTION NEUTRALIZATION

Rh 1813

3 MONTH SERUM - 1:64

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

Killed for histology: 2 pc of medulla, enlargements and cord.

SERUM DILUTION NEUTRALIZATION

Rh 1814

3 MONTH SERUM - 1:64

DATE

DAY

REMARKS

March

2

0

3

1

2

3

4

5

6

7

† died. (showed diarrhea). Autopsy: C.N.S. no bleeding or other gross lesions. - no enteritis, peritonitis.
 Spleen: no gross lesions.

- SERUM DILUTION NEUTRALIZATION

Rh 1815

3 MONTH SERUM - 1:64

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	Looks somewhat ill.
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	Looks ill; no paralysis, T104.5.
16	14	Paralysis of upper & lower. Cannot sit or stand. Sickles for virus.

- SERUM DILUTION NEUTRALIZATION

Rh 1816

3 MONTH SERUM - 1:64

DATE	DAY	REMARKS
March		
2	0	
3	1	
4	2	
5	3	6 ⁰⁰ p.m. loose stools.
6	4	9 ⁰⁰ a.m. " " . Notices.
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	Killed for histol. section: 2 pc medulla, enlargements and cord.

SERUM DILUTION NEUTRALIZATION

Rh 1817

3 MONTH SERUM - 1:16

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

SERUM DILUTION NEUTRALIZATION

Rh 1818

3 MONTH SERUM - 1:16

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

filled pathology - 2 pc. medulla - enlargements - cord.

SERUM DILUTION NEUTRALIZATION

Rh 1819

3 MONTH SERUM - 1:16

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

SERUM DILUTION NEUTRALIZATION

Rh 1820

3 MONTH SERUM - 1:16

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	Paralysis R. deltoid? T. 101 ^f
12	10	
13	11	
14	12	
15	13	Appears chunky;
16	14	Paralysis of upper and lowers. Cannot sit or stand. Killed for virus.

STANDARD B & P "NOIEAR"

STANDARD B & P "NOIEAR"

Rh 1821

3 YEAR SERUM - 1:256

DATE	Day	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	Paralysis of hind legs + partial paralysis of rt. forearm. Killed. C.N.S. for histo virus (6/24) susp.
9	7	
10	8	

SERUM DILUTION NEUTRALIZATION

Rh 1822

3 YEAR SERUM - 1:256

DATE	DAY	REMARKS
MARCH	2	0
	3	1
	4	2
	5	3
	6	4
	7	5
	8	6
	9	7
	10	8
		complete paralysis right upper - partial left upper - weak lowers. killed for virus.

Rh 1823

3 YEAR SERUM - 1:256

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	Excited, pilomotor, tremor.
12	10	excited, pilomotor, tremor
13	11	" " "
14	12	Paralysis of lowers, unable to use the lowers.
15	13	" " "
16	14	" " "
17	15	" " "
18	16	" " "
19	17	" " "
20	18	" " "
21	19	" " "
22	20	" " "
23	21	" " "
24	22	" " "
25	23	" " "
26	24	" " "
27	25	" " "
28	26	" " "
29	27	" " "
April 12	12	partial residual paralysis of lowers. Stand up? Cannot stand.

SERUM DILUTION NEUTRALIZATION

Rh 1824

3 YEAR SERUM - 1:256

DATE	DAY	REMARKS
MARCH	2	0
	3	1
	4	2
	5	3
	6	4
	7	5
	8	6
	9	7
	10	8
	11	9
	12	10

Excited-pilo motor.
Partial paralysis lowers and uppers killed for virus.

SERUM DILUTION NEUTRALIZATION

Rh 1825

3 YEAR SERUM - 1/64

DATE	DAY	REMARKS
March		
2	0	
3	1	
4	2	f. Shred fluid feces with blood and slime. Autopsy: CNS: no bleeding or other gross lesions. - hemorrhagic enteritis with blood and slime. No peritonitis. Thorax: no gross lesions.
	3	
	4	
	5	
	6	
	7	

SERUM DILUTION NEUTRALIZATION

Rh 1826

3 YEAR SERUM - 1:64

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

Rh 1827

3 YEAR SERUM - 1:64

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

SERUM DILUTION NEUTRALIZATION

Rh 1828

3 YEAR SERUM - 1:64

DATE	DAY	REMARKS
March		
2	0	
3	1	
4	2	
5	3	
6	4	9 am feces with blood and slime. 10^{30} succsalina subcut. and 50 cc 1/2% feces blood + slime. Same therapy. sulfadiazine in saline i.p. 5 pm. ditto.
7	5	
8	6	Diarrhea, no blood. Prostrate. No paralysis. Killed (nearly dead) and GNS for histol. exam. - intestines: hemorrhagic enteritis.
9	7	
10	8	

STANDARD B & P "NOIFEAR"

STANDARD B & P

SERUM DILUTION NEUTRALIZATION

Rh 1829

3 YEAR SERUM - 1:16

DATE	DAY	REMARKS
March		
2	0	
3	1	
4	2	
5	3	6 ⁰⁰ p.m. feces with blood and slime. Looks healthy
6	4	feces normal
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	filled for histology: 2 pr. medulla, enlargements, cord.

SERUM DILUTION NEUTRALIZATION

Rh 1830

3 YEAR SERUM - 1:16

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	Partial paralysis of rt. upper and partial paralysis of lowers - <i>Paralysis also yesterday present.</i>
27	25	Complete paralysis of uppers and lowers; prostrate.
28	26	Dead - discarded.

Rh 1831

3 YEAR SERUM - 1/16

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	Sick. feces blood + slime. 2x daily 50cc saline s.c. and 50cc $\frac{1}{2}\%$ Sulfadiazine i.p.
8	6	Feces slime + blood. Same therapy
9	7	found dead this morning. C.N.S. for histol. exam. Autopsy showed no gross
10	8	lesions. Abdomen: a number of middle size lymph nodes in the mesenterium - subacute hemorrhagic enteritis.

SERUM DILUTION NEUTRALIZATION

Rh 1832

3 YEAR SERUM - 1:16

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

SERUM DILUTION NEUTRALIZATION

Rh 1833

3 YEAR SERUM - 1:4

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

SERUM DILUTION NEUTRALIZATION

Rh 1834

3 YEAR SERUM - 1:4

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	
31	29	Hicken histology 2 pc medulla. enlargements, Carol.

Rh 1835

3 YEAR SERUM - 1:4

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	
31	29	Killed for histology. 2 for medulla, enlargement, card.

SERUM DILUTION NEUTRALIZATION

Rh 1836

3 YEAR SERUM - 1:4

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
20	28	
21	29	killed for histology. spc. medulla, enlargements, card.

RD B & P "NOTEAR"

STANDARD B & P "NOTEAR"

Rh 1837

3 YEAR SERUM - UNDI.

DATE	DAY	REMARKS
MARCH	2	0
	3	1
	4	2
	5	3
	6	4
	7	5
	8	6
	9	7
	10	8
	11	9
	12	10
	13	11
	14	12
	15	13
	16	14
	17	15
	18	16
	19	17
	20	18
	21	19
	22	20
	23	21
	24	22
	25	23
	26	24
	27	25
	28	26
	29	27
	30	28
	31	29
april	1	30
	2	31

Very excitable; pilo-motor reaction.

Very excitable; pilo-motor reaction.

Pilo-motor reaction.

Killed for histology. sp. medulla, enlargements & cord.

SERUM DILUTION NEUTRALIZATION

Rh 1838

3 YEAR SERUM - UNDIL.

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	
31	29	
april 1	30	
2	31	killed for histology. s.p.c. medulla, enlargements, cond.

SERUM DILUTION NEUTRALIZATION

Rh 1839

3 YEAR SERUM - UNDIL.

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	Very excitable; no pilomotor reaction.
9	7	Very excitable; no pilomotor reaction.
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	Very excitable
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	
31	29	
April 1	30	
2	31	Killed for histology. sp. medulla, enlargements, card.

SERUM DILUTION NEUTRALIZATION

Rh 1840

3 YEAR SERUM - UNDI.

DATE	DAY	REMARKS
MARCH	2	0
	3	1
	4	2
	5	3
	6	4
	7	5
	8	6
	9	7
	10	8
	11	9
	12	10
	13	11
	14	12
	15	13 Very excitable
	16	14
	17	15
	18	16 part. paralysis lowers?
	19	17 no symptoms.
	20	18
	21	19
	22	20
	23	21
	24	22
	25	23
	26	24
	27	25
	28	26
	29	27
	30	28
	31	29
	1	30
April	2	31 Killed for histology: sp. medulla, enlargements and cord.

Rh 1678x

SALINE CONTROL - $10^{-4.3}$

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	Weak lowers. Partial paralysis of rt. arm
15	13	" " " " " "
16	14	Very definite paralysis of lowers and rt. upper.
17	15	" " " " " "
18	16	" " " " " "
19	17	" " " " " "
20	18	
21	19	" " " " " "
22	20	
23	21	
24	22	" " " " " "
25	23	
26	24	" " " " " "
27	25	" " " " " "
28	26	" " " " " "
29	27	" " " " " "
April 12 th		much improved. Runs and climbs. practically no evidence of paralysis.

— SERUM DILUTION NEUTRALIZATION

Rh 1680x

SALINE CONTROL - / 0⁻⁴³

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	
31	29	Killed for histology 2/pc. medulla, enlargements, cord.

SERUM DILUTION NEUTRALIZATION

Rh 1681x

SALINE CONTROL - 10^{-43}

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	Very excitable
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	
31	29	skipped for histology. 2 pc medulla, embargements, cand.

SERUM DILUTION NEUTRALIZATION

Rh 1682x

SALINE CONTROL - $10^{-3.3}$

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	partial p. left upper - weak r. upper - weak lowers. Killed for viruses

SERUM DILUTION NEUTRALIZATION

Rh 1699x

SALINE CONTROL - 10-33

DATE	DAY	REMARKS
MARCH	2	0
	3	1
	4	2
	5	3
	6	4
	7	5
	8	6
	9	7
	10	8
	11	9
	12	10
	13	11
	14	12
	15	13
	16	14
	17	15
	18	16
	19	17
	20	18
	21	19
	22	20
	23	21
	24	22
	25	23
	26	24
	27	25
	28	26
	29	27
	30	28
	31	29

Killed for histology. 2 sp. medulla, enlargements, cord.

SERUM DILUTION NEUTRALIZATION

Rh 1700x

SALINE CONTROL - $10^{-3.3}$

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	Paralysis of lowers and left eyes. Cannot sit or stand. Killed for virus.

SERUM DILUTION NEUTRALIZATION

Rh 1702x

SALINE CONTROL - 10^{-3.3}

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

SERUM DILUTION NEUTRALIZATION

Rh 1841

SALINE CONTROL - 10^{-2.3}

DATE	DAY	REMARKS
MARCH	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	Definite paralysis of lowers.
	20	" " " "
	21	" " " "
	22	" " " "
	23	" " " "
	24	" " " "
	25	" " " "
	26	" " " "
	27	" " " "
April	12 th	Almost complete recovery. Some residual weakness of lowers. Used for hyperimmune serum.

— SERUM DILUTION NEUTRALIZATION

Rh 1842

SALINE CONTROL — $10^{-2.3}$

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	
12	10	
13	11	
14	12	
15	13	
16	14	
17	15	
18	16	
19	17	
20	18	
21	19	
22	20	
23	21	
24	22	
25	23	
26	24	
27	25	
28	26	
29	27	
30	28	
31	29	Killed for histology. s.p.c. medulla, enlargements, cord.

SERUM DILUTION NEUTRALIZATION

Rh 1843

SALINE CONTROL - 10-2.3

DATE	DAY	REMARKS
March		
2	0	
3	1	
4	2	
5	3	Sick; blood diarrhea. 6 ⁰⁰ pm. very sick.
6	4	9 ^{am} dead. sections 6 WJ in Denver
	5	
	6	
	7	

SERUM DILUTION NEUTRALIZATION

Rh 1844

SALINE CONTROL - $10^{-2.3}$

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	Excited, pilomotor, clumsy
12	10	Excited, pilomotor, clumsy.
13	11	" " "
14	12	" " "
15	13	Pilomotor; clumsy.
16	14	clumsy
17	15	"
18	16	"
19	17	"
20	18	"
21	19	"
22	20	"
23	21	"
24	22	"
25	23	"
26	24	"
27	25	"
28	26	
29	27	
30	28	
31	29	Killed for histology. 2 pr. medulla - enlargements, coral thorax. <u>prostate</u>

SERUM DILUTION NEUTRALIZATION

Rh 1845

SALINE CONTROL - $10^{-1.3}$

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	Paralysis of uppers, L > R. Weakness of lowers. Killed. CNS (cond) for viruses.
9	7	
10	8	

SERUM DILUTION NEUTRALIZATION

Rh 1846

SALINE CONTROL - 10^{-1.3}

DATE	DAY	REMARKS
MARCH	2	0
	3	1
	4	2
	5	3
	6	4
	7	5
	8	6
	9	7
	10	8
		Total paralysis of ret. upper and paralysis of lower limbs. Impossible to walk or climb. Killed for virus cord suspension.

STANDARD B & P "NOIEAR"

STANDARD B & P "NOIEAR"

SERUM DILUTION

NEUTRALIZATION

Rh 1847

SALINE CONTROL - $10^{-1.3}$

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	
11	9	extensive paralysis upper and lower - crawls - cannot sit up. killed for virus.

SERUM DILUTION NEUTRALIZATION

Rh 1848

SALINE CONTROL - $10^{-1.3}$

DATE	DAY	REMARKS
MARCH 2	0	
3	1	
4	2	
5	3	
6	4	
7	5	
8	6	
9	7	
10	8	Partial analysis of lowers, R > L. Killed for virus.