

Poliu 1947.



Aeron.

Polio - Akron, Ohio. 1947

white, ♂, 15 yrs.

Adm. 8/27/47.

Onset: 8/26/47.

History: Pt. complained of backache and lassitude on 8/26/47 - all of which he ascribed to football practice all that day. - No headache or pain in the neck. - Mother thought child did not look well. -

Admission: T. 99² (oral)

Exam:

Has rigid spine with considerable spasm; There is rather marked neck rigidity. - Nothing else.

CSF: 8/27

cells.	lymphs	polys	globulin
100	95%	5%	+

Notes: 8/28. - T. 100⁴. - Still has very marked neck and spine rigidity. - Feels "tired all over" - but has no demonstrable weakness. ^{hamstrings}

8/29. - T. 100⁴. - Now weakness - but considerable spasm of back, hamstrings & a little less of neck

8/30. T. 99⁰. - A little less spasm, feels better generally.

OP Swabs

Stool

8/27 ✓
8/28 ✓
8/29 ✓
8/30.
8/30 - P.M.

✓ (small)
✓ formed.
- poor specimen discarded.
- poor specimen discarded.
✓ specimen - 3m.
- am't solid.

JAN 7 1948

A. Stool Suspension -

Solids present	25 gms.	} 10% susp
liquid present	50 cc.	
Saline Added	200 cc.	

Blended at low speed for one minute. -

Portion Refrozen = ± 120 cc (Box "C") 12-16-48 Discarded
Remainder allowed to settle in 100 cc. centrifuge tubes overnight.

1-8-48. For Intranasal Inoculation = 35 cc.

Etherization: = 100 cc stool susp. with 20.0 cc of ether - shaken
for 10 minutes; ice-box overnight.

1-9-48 - Centrifuged for 30', horizontal.

Final Amount of Supernatant = 75.0 cc

1/10

Culture: $\times \pm 25$ smooth uniform colonies.

1-10-48. Re-Etherized with 15.0 cc - STAB? -

Culture: $\checkmark \times 1$ col. (Thick sm. neg. rods.)

JAN 7 1948

B. Pharyngeal Swab Material -

Swabs plus 0.6 cc. Buffer #1 = 2.8 cc.

Buffer #2 = 0.6 cc

3.4 cc

Ether - 1.0 cc added; shaken for 10'; refrigerated.

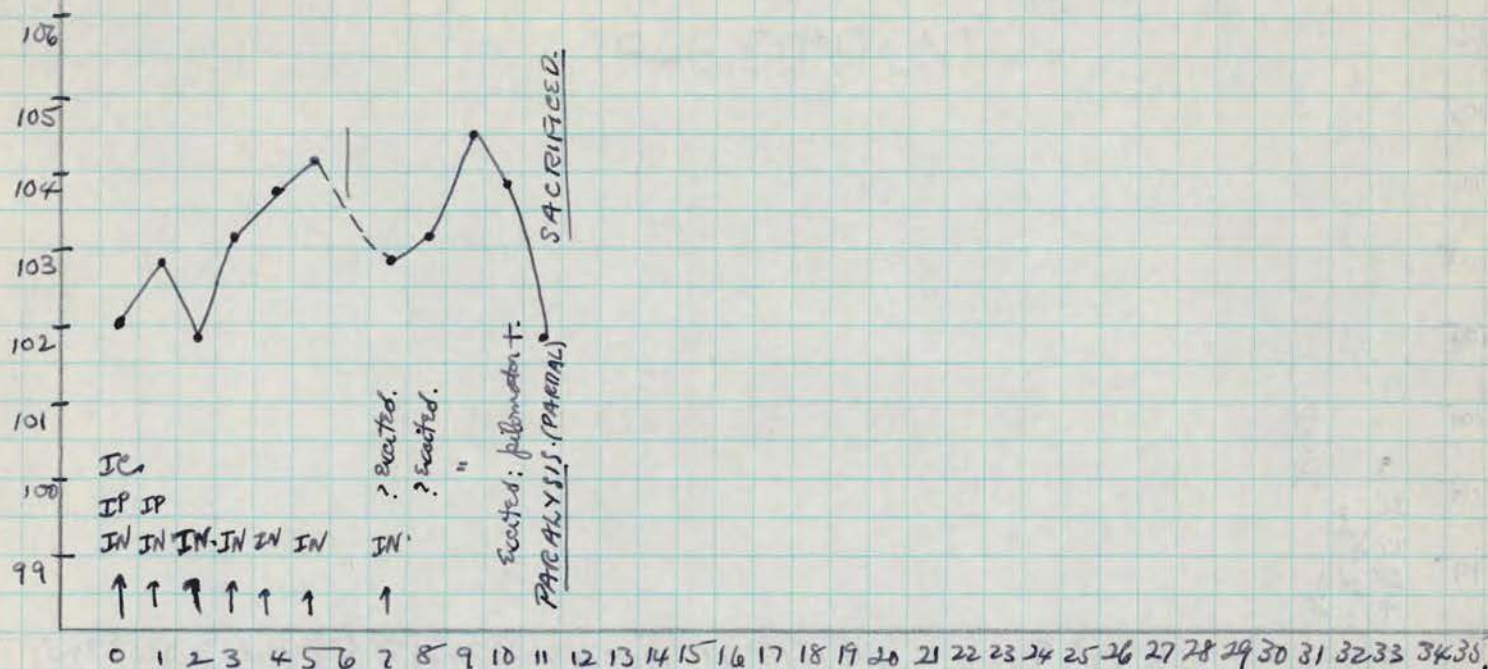
1-8-48. Centrifuged on horizontal for 15'.

Culture: w/

JAN 12 1948

-Rhesus #87-

Treated pharyngeal swabs - IC ✓✓
Treated stools IP ✓✓
untreated stools IN ✓✓
Col. Thru's
Gram Stain
rods



1-12-48. Inoculated 1.5 cc IP; 20 cc IP and 1 cc per nostril.

1-13-48. Seem perfectly O.K. - see CYN. 86 (overleaf).

1-14-48

1-23-48 - A.M. tremors; excited; pilomotor +; no weakness or paralysis on cage exercise.

P.M. Partial paralysis both lowers. Back weak - slumps when put into sitting posture; upper limbs + cranial nerves seem O.K. -

Anesthetized (chloroform) Autopsy: no gross TBC.

COLON CONTENT: frozen in tasteroid tube. B-3-4

TISSUE FOR PATHOLOGY: cord levels; medulla; olfactory bulbs. (2-A)

TISSUE FOR VIRUS: cord - medulla frozen in tasteroid tube. (d-9)

1-27-48

cord - medulla thawed. Weight 4.15 gms; made up as 20% suspension in (16.6 cc) saline.

13.6 cc of suspension frozen in one 20 cc and one 10 cc ampoule (B-3-5)

Cultured: ✓✓✓

3-1-48

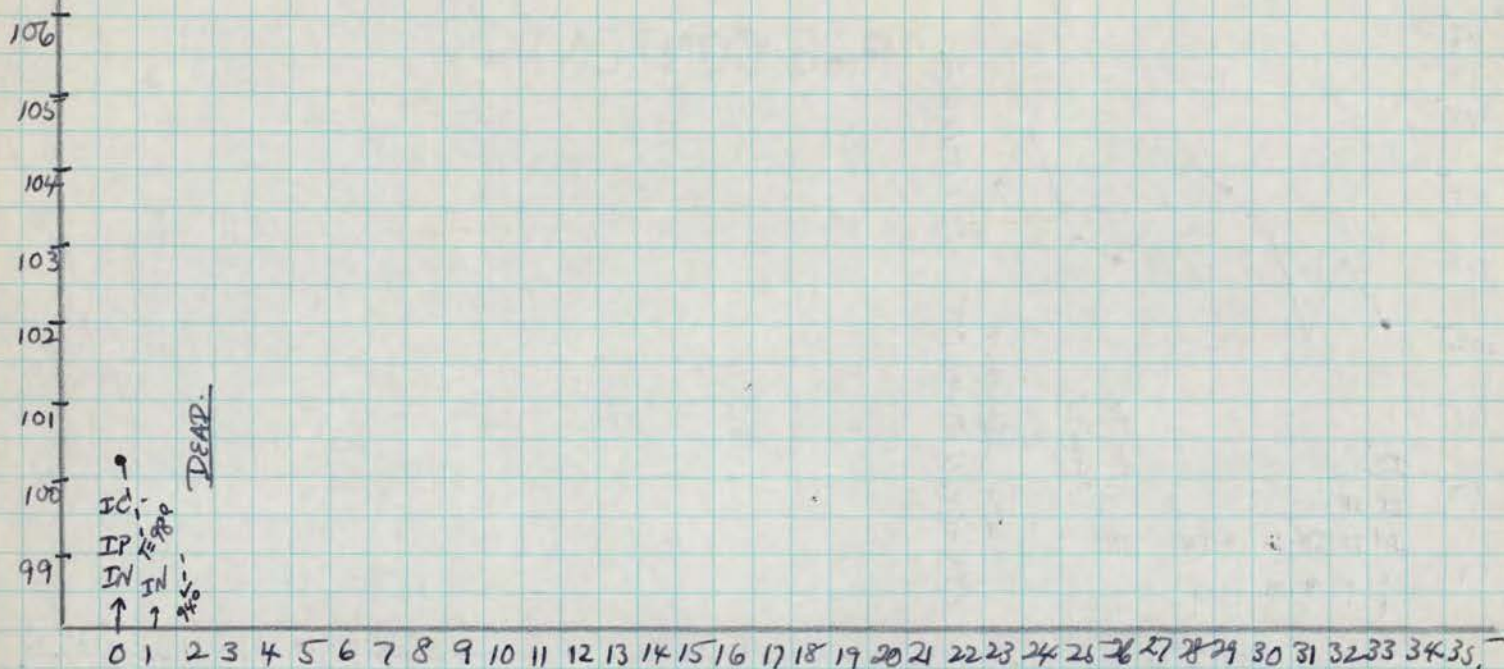
Both amps thawed and 2.0 cc removed for passage to RL #1616 & RL #1714

remainder of both amps pooled in one 20 cc amp, refrozen and stored (B-3-5)

Histology - Polio

JAN 12 1948

CYNOMOLGUS #86 -



1-12-48 - inoculated 1.5 cc IC; 20 cc IP; and 1 cc per rectum.

1-13-48 - Monkey looks miserable; weak all over; not eating; breathing rapidly. T = 98.0 -

3:30 p.m. Heart Blood Culture :- No growth. -
(TSB)

Given 100,000 μ penicillin IP at 3:30 p.m.

1-14-48 - 9:00 A.M. - alive but prostrate; given 100,000 μ penicillin IP.

3:30 p.m. Moribund probably; given 100,000 μ penicillin IP and 100 mgms. of Streptomycin IP. - ~~Heart Blood Culture~~

5:30 p.m. Dead.

Autopsy: Lungs grossly normal;

Peritoneum: not injected; small amt of turbid fluid (± 10 c.c.) which may represent the injection of antibiotic given at 3:30 p.m.

Smear of This Fluid: - No bacteria; scattered RBC's & WBC's: does not suggest exudate.

Cult of This Fluid (BAP): - ✓✓

cause of Death?

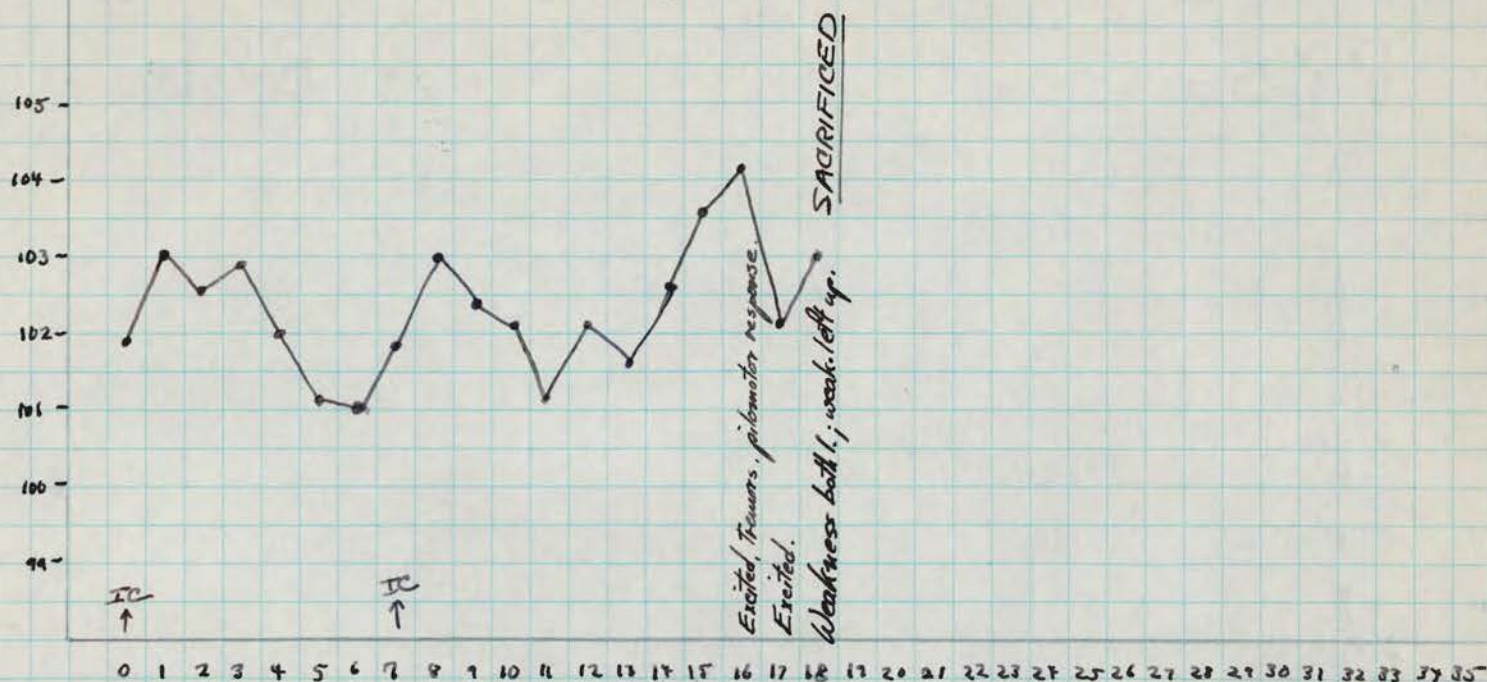
1-18-48 - Peritoneal fluid frozen in aa skimmed milk pH = 7. (B-1-1)

12-16-48 Perit fluid Discarded

MAR 1 1948

STRAIN - Generation ii

Rhesus #1714 - Splenectomized



3-1-48: Inoc. IC = 1.0 cc. of a 20% susp. in saline of Sickle strain - gen. ii

3-8-48 - Re-inoc. IC with 1.0 cc of 20% [redacted] strain - Gen. i.

3-19-48: Weakness both lowers & left upper. Pilo motor response.

Sacrificed: (chloroform - exsanguination) Autopsy: No gross tbc.

TISSUE FOR SECTION: Sections of lumbar & cervical cord (2-A).

TISSUE FOR VIRUS: Remainder of cord-medulla made into a 20% susp. in (24 cc.) sterile saline. Wt. of cord = 5.5 gms. ± 2 cc frozen in 2-20 cc amps (Amps #1, 2, 3) and stored. Culture: ✓✓✓ (B-4-5)

MAR 1 1948

STRAIN - Generation ii

Rhesus #1616 - Splenectomized.

105
104
103
102
101
100
99

IC
↑
Dead in cage. Discarded.
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 28 29 30 31 32 33 34 35

3-1-48: Inoc. IC with a 1.0cc. amt. of a 20% susp. in saline
of [redacted] strain - gen. i.

3-2-48: Found dead in cage - hanging by neck.
Saved for X-ray of neck. (no fracture demonstrated)

MAY 12 1948

STRAIN - Generation III

Rh. #431



5-12-48: Inoc. IC. with 1.0×10^8 of 20% saline Virus - Gen II

5-26-48: Re-inoc " " " " " " " " " " " "

6-16-48: SACRIFICED: (chloroform-exsanguination)

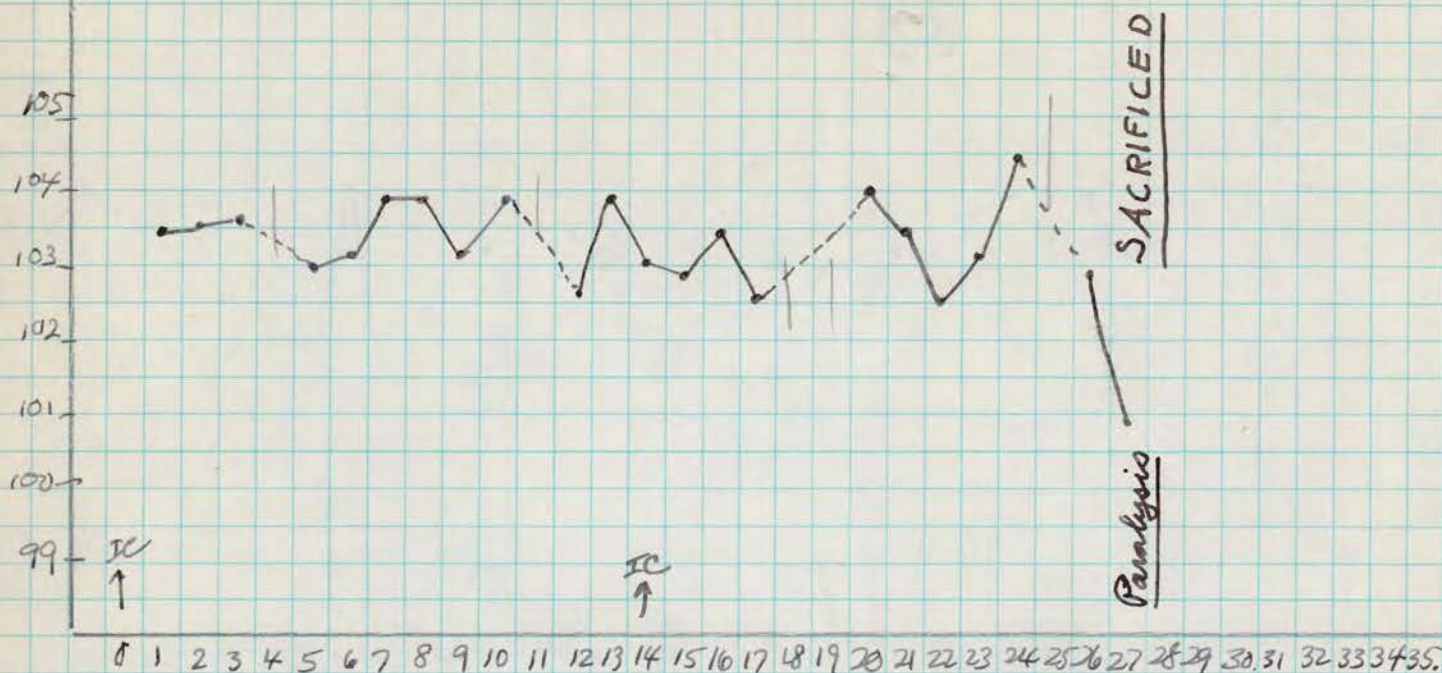
AUTOPSY: No gross lbc.

TISSUE FOR SECTION: Single segments of lumbar, thoracic, cervical cord, medulla, and midbrain & thalamus in (Z.A.)

MAY 12 1948

STRAIN - Generation III

Rh. #432-



5-12-48 - Rec. IC with 1.0 cc of 20% in saline [redacted] Virus Gen. II

5-26-48: Re-inoc. " " " " " " " " " " " "

6-8-48. Part. par. of both lowers. Weakness of both uppers.

SACRIFICED (chloroform - exsanguination)

AUTOPSY No gross [redacted]

TISSUE FOR SECTION Single segments of lumbar and cervical cord in (2A)

TISSUE FOR VIRUS Remainder of cord and medulla frozen in a lusteroid. Stored (CB)

Constat Culture: ✓✓

6-16-48 Cord and medulla of Rh 432 thawed and made up as a 20% susp. in 24 cc of sterile saline. Weight of cord & medulla 54 gms. Due to centrifuge accident only ± 9.0 cc of susp frozen in 2-10 cc amps. (Vials #1, 2) stored (B-2-7) Culture: ✓✓

POLIO - 1947. MONKEY HISTOLOGY.

MK. #. Lum. Cor. Thomaei. Cervical. Medulla. Midbrain. Poliovirus. Hypothalamus. Opt. Bulb. Other. DRUG NOS.

PRIMARY ISOLATION.

Polio.

Polio.

No polio.
Polio (acute)

Rh. 87.

NH; PH.

NH; PH.

NH; PH.

NH; PH.

—

—

—

—

(Poor)
NT; NT

Rh. 1714.

NH.

—

NH

—

—

—

—

—

—

Rh. 431

0

0

0

0

0

0

—

—

—

Rh. 432.

NH; PH.

—

NH; PH.

—

—

—

—

—

—