

POWLO - 1947

Akron.

8/24/47

Polo - Akron, Ohio - 1947.

white; ♂. 12 yrs.

Children's Hospital
Chart # 69025

M.D.:

Adm. 8/24/47. -

Onset: 8/24/47.

C.C. Headache.

History: Awoke this morning with headache; anorexia; slight generalized weakness and/or fatigue; and malaise. Headache was most outstanding; no neck or back pain. -Admission Exam: - T = 101°; Throat sl. injected. Very mild nuchal rigidity; but no other spasms, or signs of any type.CSF: 8/24/47. -

WBC	Lymphs	Polys	Globulin
90	75%	25%	trace

Notes:

8/25/47. - Blood - OP Swabs taken.

No rigidity; neck supple today. T = 100°F.

8/26/47. - Temp. 100°F. no weakness; no findings of spasm; no reflex changes.

8/27/47. - T. 99° - Negative to exam.

8/28/47. - T. 99° - Negative to exam.

8/29/47. - T. 99°.

8/30/47. - T. 99°.

" " "

OP SwabsStool.

8/25 -	✓	✓ very clear stool.
8/26 -	✓	✓ formed
8/27 -	✓	✓ large stool.
8/28		✓ large soft stool

DEC 17 1947

A. Stools.

Solid Present 50 gms.
Liquid Present 120 cc.
Distilled water Added 380 cc.

Blended low speed for one minute

For Centrifugation
For Refreezing

± 300 cc

± 200 cc. "C"

12-16-48 gone! not available

Volume First Supernatant
Ether Added

= 185 cc.

= 37 cc.

Volume Untreated Stool sediment = 60 cc. (For intranasal use)

12/18/47. - Final Volume Stool Suspension = 170 cc.

Cult: X many colonies (Gm. neg. Thick rods - with granules or spores?)

12/19. Re-Etherized - 34.0 cc ether Added.

Cult: X dense growth (Gm. neg. Thick rods - with granules)

12/22/47. Re-Etherized 33 c.c. ether Added. to 165 cc. suspension.

12/23/47. Centrifuged for 30 minutes; middle layer inoculated IP without awaiting culture results; inoculations were made into Pk. #57 and Cyn. #57; These animals were given 50,000 units of penicillin IP simultaneously with inoculation.

Cult: X dense growth (Gm. neg. Thick rods - with granules)

DEC 17 1947

B. Pharyngeal Swab Material

Liquid Expressed	=	2.4 cc.
Dist. Water Added	=	1.6 cc.
		4.0 cc.

Ether Added = 1.5 cc.

12/18/47. After Removal of Top Layer — 3.8 cc.

After Final Centrifugation — 3.6 cc.

Culture: ✓✓✓

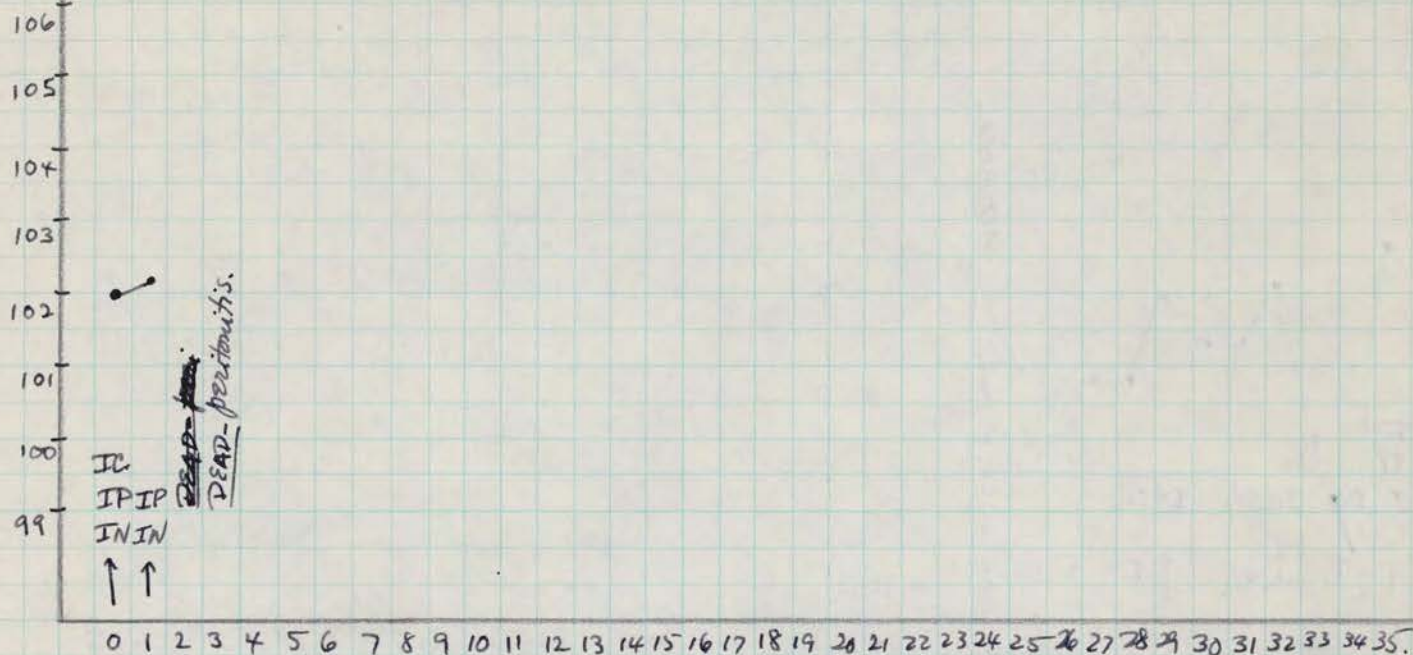
12/19/47. - Frozen (a-1) until stools are ready for use.

12/23/47. Thawed for inoculation.

DEC 23 1947

Rhesus #51

Treated pharyngeal swabs - IC. ✓✓
 Treated Stools IP. * heavy growth
 Untreated Stools IN. 2m - rods.



12/23/47. Inoculated 1.5 cc IC; 20 cc IP together with 50,000 units penicillin; and 1 cc per rectal.

12/24/47. A.M. T. 102°F; no clinical evidence of peritonitis (see Cyn. 57 - overleaf).

P.M. T. 98°F; listless; abdominal tenderness but no distension; given 100,000 units penicillin I.P. at 2 pm.

12/25/47. Given 100,000 units of penicillin I.P.

12/26/47. Dead - peritonitis; Smear = very many polys; and innumerable 2m. neg rods!

Culture = numerous hemolytic colonies (2m. neg.)

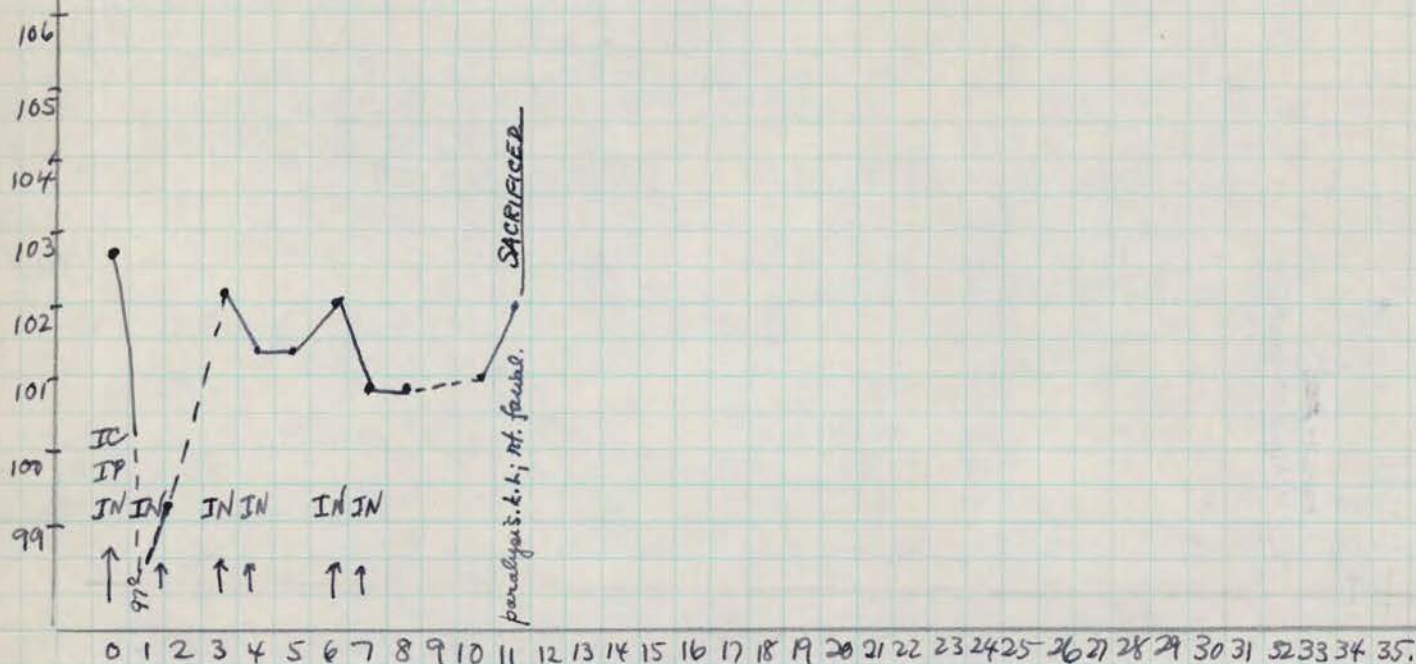
plated on McConkey and SS Agar. = 12/31/47. - lactose fermenting colonies only. -

DEC 23 1947

CYNOMOLGUS # 57

Treated pharyngeal Swabs IC
Treated stools IP
Untreated stools IN

Cult



12/23/47. Inoculated 1.5 cc. IC; 20 cc IP together with 50,000 units of penicillin; and 1.0 cc per nostril.

12/24/47. A.M. - T = 97°F; animal very listless; has abdominal distension and tenderness to palpation; given 100,000 units of penicillin IP at 9:00 A.M.

P.M. T = 99°F; not much change; given 100,000 u. penicillin.

12/25/47. Given 100,000 units of penicillin IP.

12/26/47. Seems OK clinically; given 100,000 units of penicillin IP at 11:30 P.M.; seems to have pain in rt. wrist + uses it poorly; wrist may have been injured in handling monkey.

1-3-48 - Paralysis rt. lower; weakness left lower; paralysis rt. facial;

Sacrificed (chloroform) - AUTOPSY: no gross tuberculous; firm peritoneal adhesion between cecum and parietal peritoneum.

COLON CONTENTS: frozen in masteroid tube. (9-20-48. Tested for polio virus ser. "Monkey Feces study")

TISSUE FOR HISTOPATHOLOGY: - Cord levels; medulla; pons; Thalamus. (Factory Cells (Z.A.)

TISSUE FOR VIRUS: cord-medulla weight = 4.0 gm; made up as 20% suspension.

i.e. 16 cc. saline, and frozen in 2 20 cc glass amples, (B-1-7)

Cult: ✓✓

2/13/48

One ampoule (166) was thawed and 2 cc were removed for passage to Monkeys R[#] 130 & R[#] 1571. Ampoule (now designated as NO. 1) refrozen & stored.

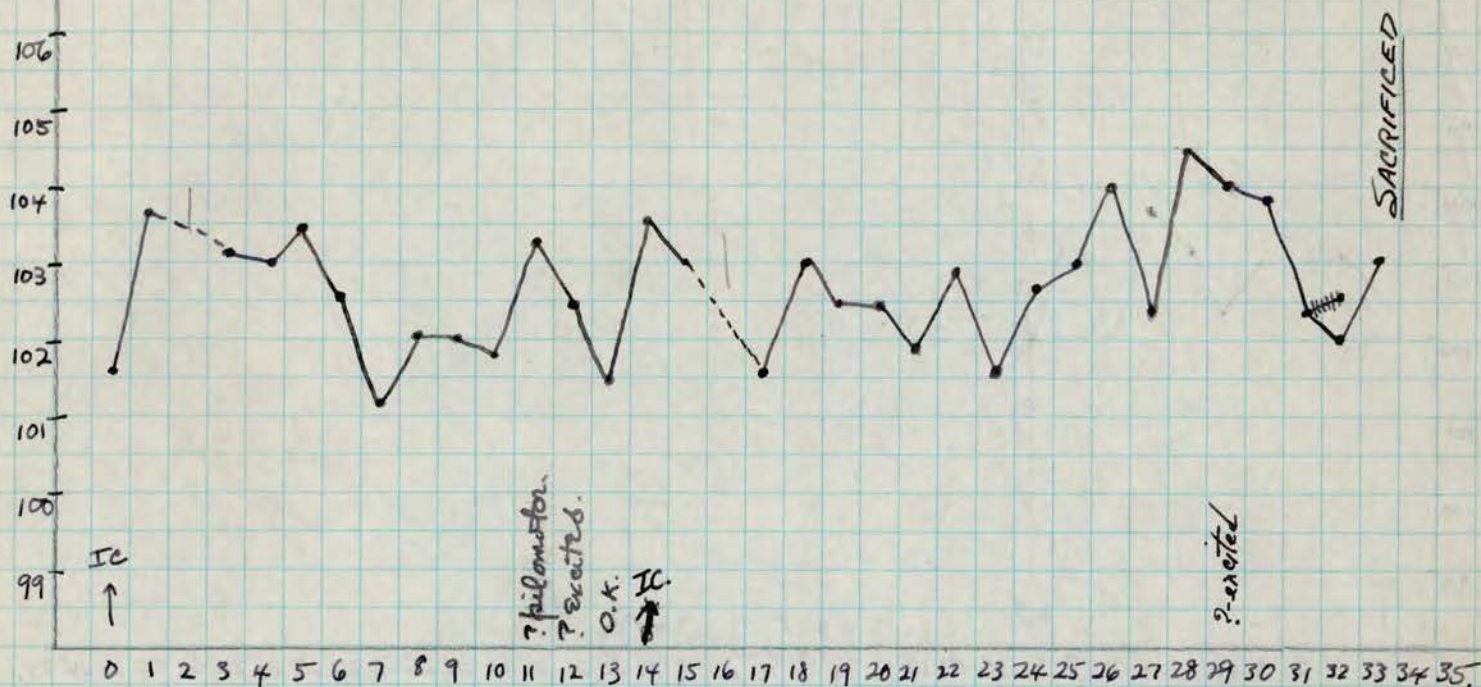
(B-1-7)

Histology - Polio (acute)

FEB 13 1948

- Generation II

Rhesus #130 - (normal)



2-13-48 - Inoc. IC with 1.0 cc of 20% in Saline Cole virus - Gen T.

2-27-48 Re-inoculated IC (opposite side) with 1.0 cc of Cole virus - Gen T.

~~3-13~~

3-17-48: No clinical symptomatology.

Sacrificed (chloroform - exsanguination) Autopsy:

TISSUE FOR HISTOPATHOLOGY: Sections taken of medulla, cervical, thoracic + lumbar cord. (2-A).

TISSUE FOR VIRUS: Remainder of cord-medulla made into a 20% susp. in (18 cc.) sterile saline. Wt. of cord = 4.3 gms. ± 16 cc. frozen in 2.20 cc. amp and stored.

Culture: ✓✓✓

(B-2-7)

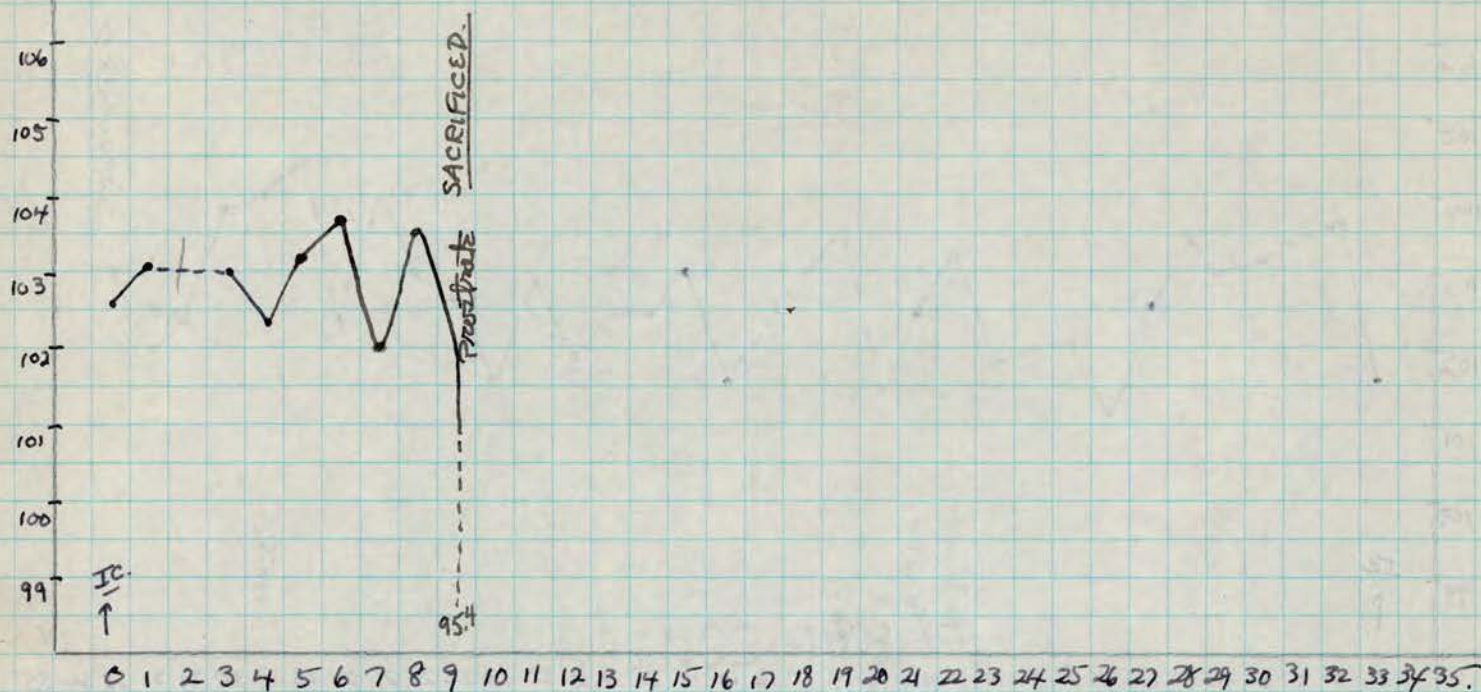
HISTOLOGY: The medulla shows considerable PV infiltration; with mild interstitial glial infiltration in reticular substance. The 3 Cord levels show fairly recent neuronophagia, - there are some neuronal "ghosts"; no root changes.

DIAGNOSIS: POLIO - ACUTE - RECENT.

FEB 13 1948

- Generation II

Rhesus # 1571 - (splenectomized)



2-13-48. Inoc. IC with 1.0 cc of 20% in saline Cole virus - gen. T.

2-22-48. Prostrate, cranial nerves OK except voice is weak; feeble movements of left wrist. T = 95.4.

Sacrificed (chloroform exsanguination) -

TISSUE FOR PATHOLOGY: lower lumbar & mid cervical cord sections (Z.A)

TISSUE FOR VIRUS: - cord-medulla frozen in kisteroid. (B-3-9)

Contact culture of cord on BAP: - ✓✓✓

3-13-48: Cord-medulla thawed and made into a 20% susp. in (20 cc.) sterile saline. Wt. of cord = 4.9 gms. ± 17 cc. frozen in 2-20 amp. marked, vials #1 and #2. stored (B-3-6) Cultured: ✓✓✓.

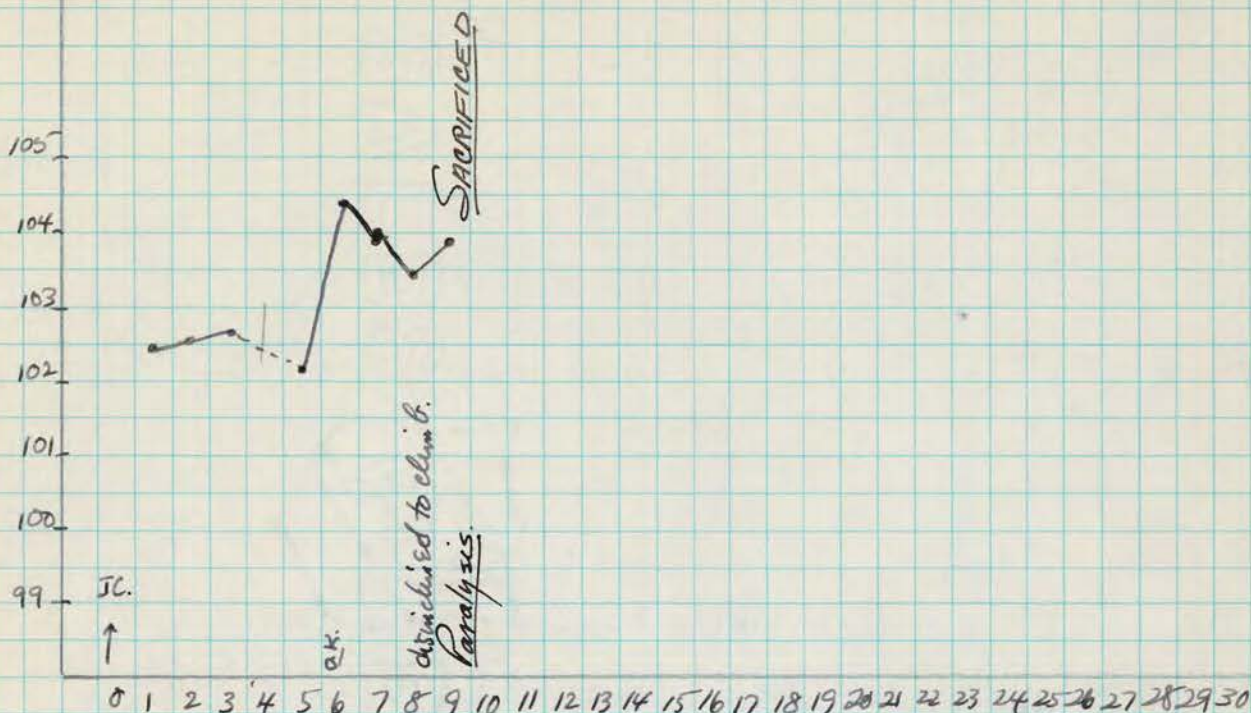
HISTOLOGY: ^{cervical and lumbar} Acute neuronophagia; PV infiltration of cervical.

DIAGNOSIS: POLIO (acute).

MAY 12 1948

Generation III

Rh. # 427-



5-12-48 Inoc. I.C. with 1.0 cc of 20% saline - Cells Virus - Gen III of Rh 1571

5-21-48: Par. par. left lower. Weakness of other 3 extremities.

SACRIFICED (chloroform - exsanguination) Autopsy: No gross lbc.
TISSUE FOR SECTION - One segment from each of lumbar and cervical cord levels.

TISSUE FOR VIRUS - Remainder of cord-medulla frozen in a histoid tube Culture: ✓✓ (d-8)

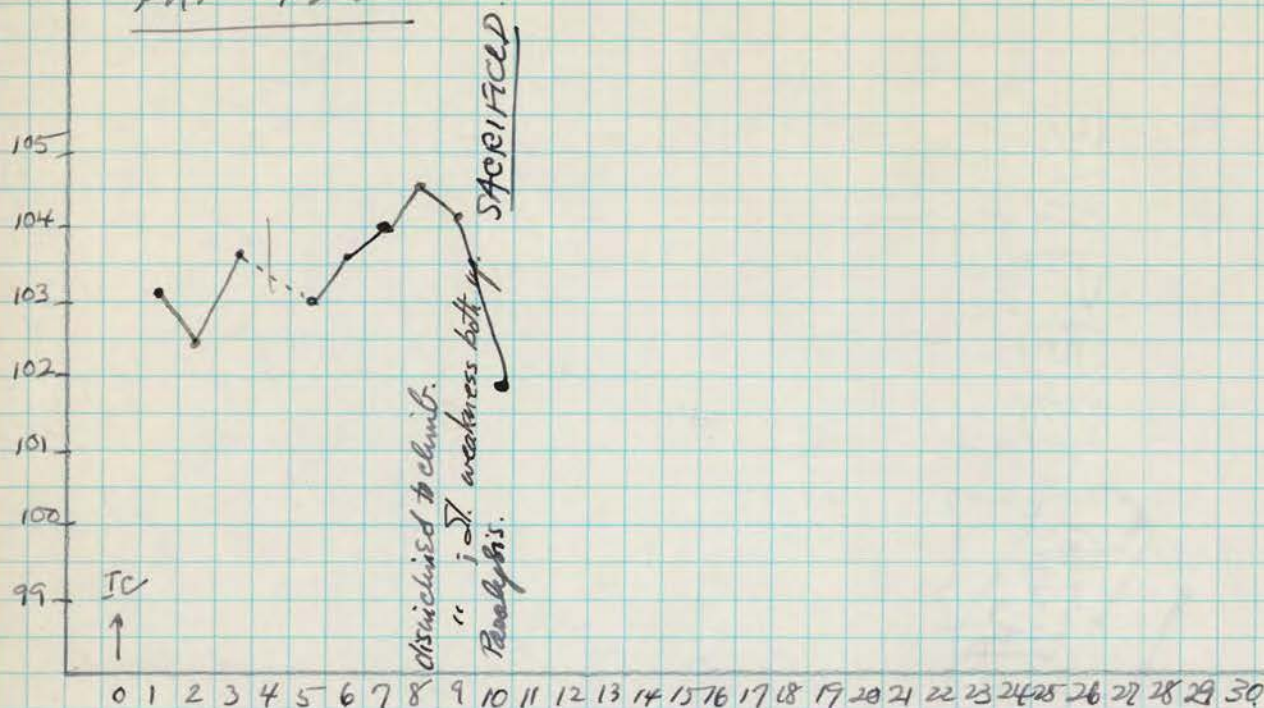
5-22-48: Cord-medulla of Rh 427 thawed and pooled with that of Rh 428 to make a 20% susp. in (44 cc) sterile saline. Wt. of pooled cords + medullas = 11 gms. ± 37 cc. frozen in 4-20 cc ampo. (designated as Vials #1, 2, 3, 4) Stored (B-2-4) Culture: ✓✓

11-19-48 tissues for section discarded

MAY 12 1948

Generation III

Ph. # 428 -



5-12-48 - Ind. IC with 1.0 cc 20% saline Cole Virus - Gen II

5-22-48 - Partial paralysis left lower; weakness of other 3 extremities; back; neck; voice + cranial nerves O.K.

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

TISSUE FOR SECTION - One piece from each of lumbar and cervical cord levels. (Z-A)

TISSUE FOR VIRUS - Remainder of cord-medulla pooled with that of Ph 427 to make a 20% susp. in saline. (Overleaf).

11-19-48 tissues for section discarded