

Plio 1947.

Cincinnati.

Ward H - Contagious

8/19/47

- white female - age 21 months -

ONSET - ~~8-14~~ ~~8/15~~ - Fever, vomiting - pain in back of knees
8-16 - Fever and vomiting subsided and limp
noted

8/18 - at Children's - CSF = 126 WBC - 66 Polys
at Contagious - CSF = 140 WBC

8/19 - Temp. 99.8°. Child can stand up by itself
but puts arms around your neck to
hold on. Unable to examine because
of dirty diaper and feces all
over body.

Throat swab I
Stool I
Blood.

8/20 - Temp 100° - somewhat weak on standing
and walking
Swab II
3 enemas given but because there were no
solid returns, none was saved.

8/29 - Blood II obtained

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A. Stools.

Estimated Solids Present	30 Gms.
Fluids Present	150 c.c.
Distilled Water Added	150 c.c.

Blended for one minute, low speed → ± 370 c.c. of blend.

For Centrifugation	± 270 c.c.
For Re-freezing	± 100 c.c. (Box "C")

First Supernatant	=	175 c.c.
Ether Added	=	36.0 c.c.

Untreated Sediment = 36.0 cc. (For intranasal inoculation)

11/11/47. - Final Amount Treated Stool Susps. = 140 c.c.

Cult. (Before Final Centrifugation) :- * many colonies.
Cult. (After ") :- ✓✓✓

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B. Pharyngeal Swab Material:-

Fluid Expresed	2.5 c.c.
Distilled Water Added	1.5 cc.
Volume	4.0 cc.
Ether Added	1.5 c.c.

11/11/47. - After Removal Top layer = 3.4 c.c.

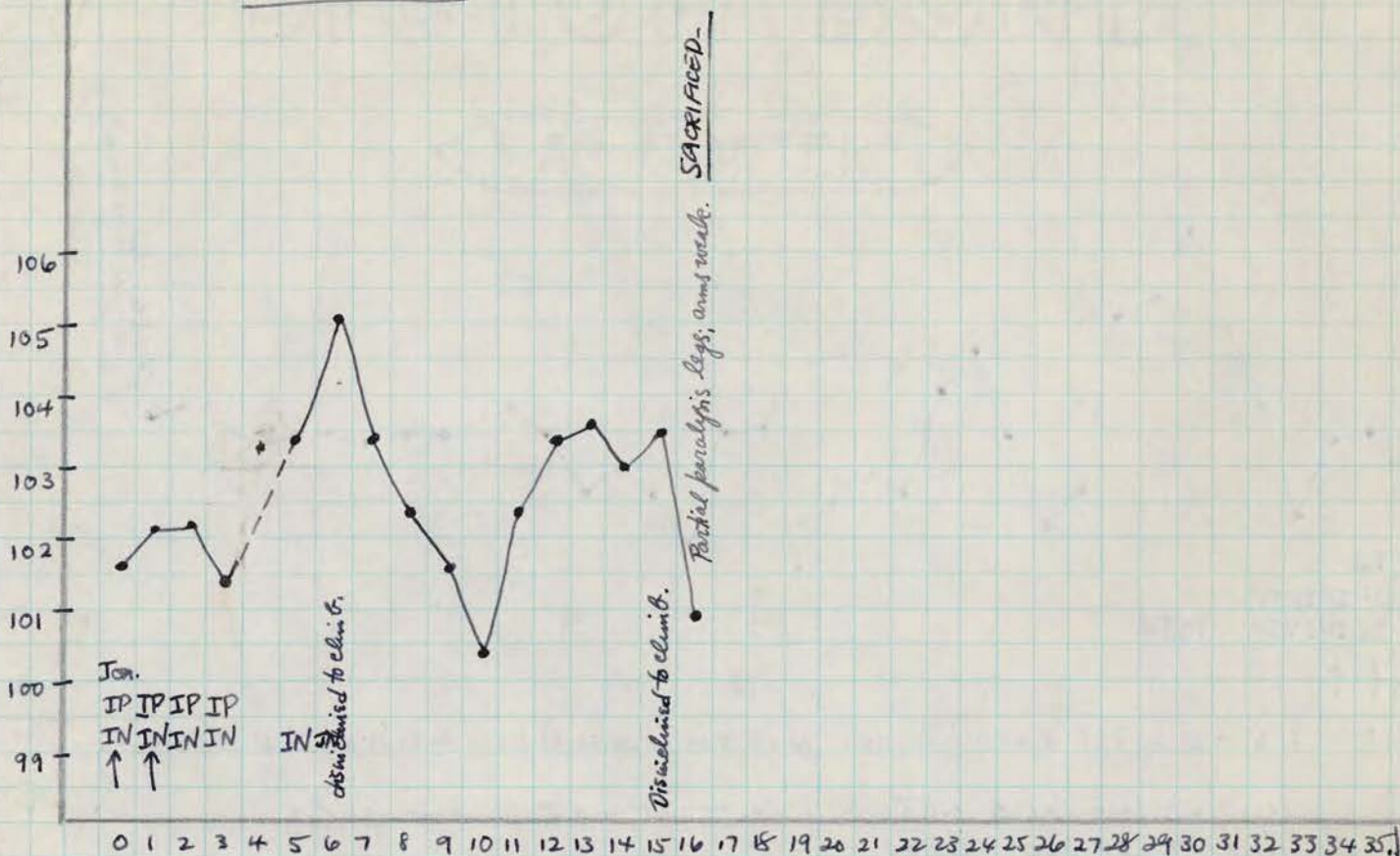
After Final Centrifugation = 3.0 c.c.

Culture: ✓✓✓

NOV 12 1947

Treated Pharyngeal Swabs - Icer. ✓✓
Treated Stools — IP ✓✓
Untreated Stools — IN ✓✓

Rhesus # 4 -



11/12/47. - Inoculated 1.5 cc. Icer; also IP, IN inoculation routine.

11/15/47. - IP in a. = 12.0 c.c.

11/20/47. - No weakness or paralysis; cranial nerves OK; no tremor or excitement; hair OK; climbs briskly.

11/21/47. Hair? erect on chest; no other signs.

11/22/47. Hair? erect on chest; not excited; good power; cranial nerves intact; is able to climb but disinclined to do so.

11/23/47. - Climbs actively; good power all limbs; cranial nerves intact; hair OK; not excited.

11/28/47. - Almost complete paralysis legs; arms very weak; cranial nerves intact.

Sacrificed with Chloroform; Autopsy. - No gross evidence of tuberculosis.

COLON CONTENTS: Frozen in large tumbleroid tube. (storage box #2)

HISTOPATHOLOGY - sections of cord levels; medulla; Thalamus.

TISSUE FOR VIRUS: - Spinal cord frozen in tumbleroid tube. (C-8)

12/11/47 - Thawed, made up as 20% susp. in saline; frozen in one ampoule d-3

{ Cord wt: 4.0 gms. Cuet: ✓✓
{ Saline = 20 c.c. ? centrifuge amount & loss of mass

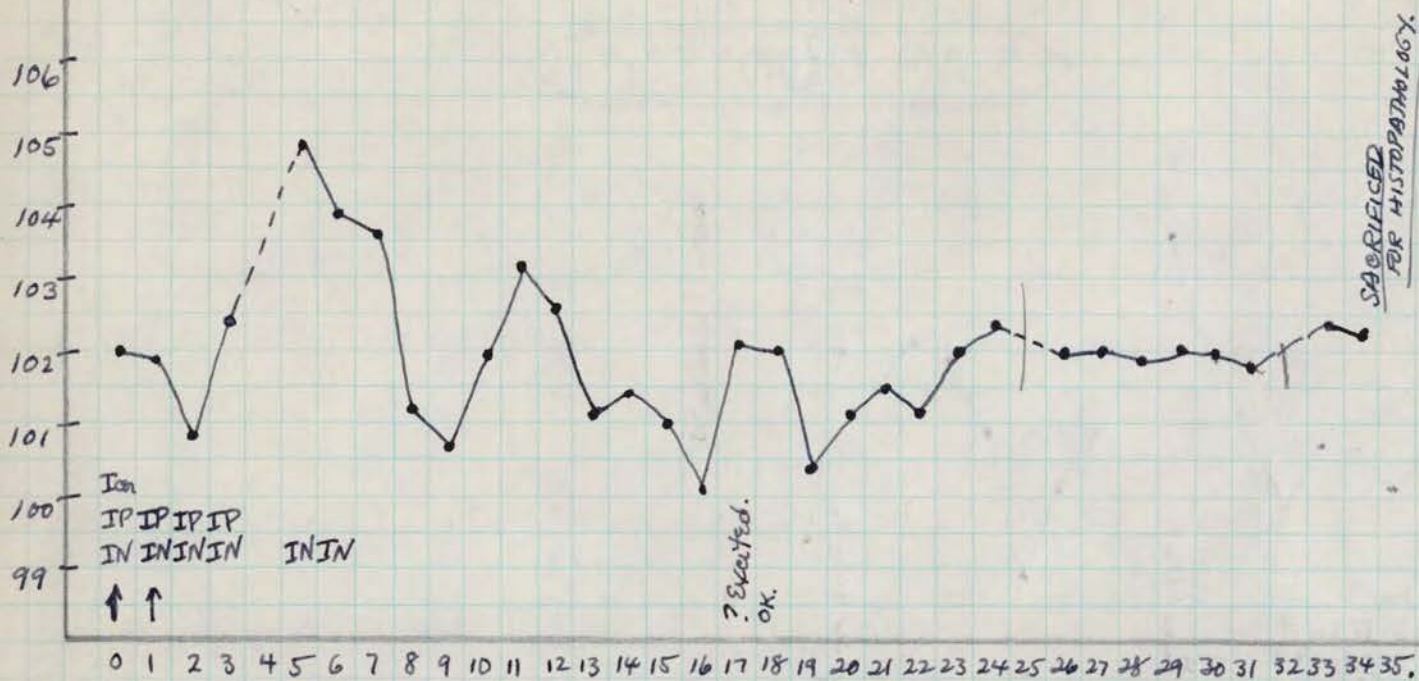
Histology - Polio

2-11-48 - ampoule of suspension thawed and 2.0 cc removed for passage to R#128 and R#1687. Remained refrozen and stored. (d3)

2-25-48 - This ampoule of Haffing Sm. + virus R# - Thawed; 2.0 cc removed in order to inoculate R# 128 and R# 1687 again (g.v.). - Refrozen. (B-1-8)

Treated Pharyngeal Swabs Icer.
Treated Stools ————— IP
Untreated Stools ————— IN

Rhesus #1134 - Splenectomized.



11/12/47. Inoculated 1.50 c.c. Icer.; - IP and IN also inoculated.

11/15/47. IP Inc. = 12.0 c.c.

11/20/47. - Climbs actively. no weakness or paralysis; cranial nerves OK; no excitement.

11/24/47. ? excited; no drowsiness or paralysis; not easily exhausted.

12-16-47- Sacrificed (chloroform-exsanguination) for Histopathology.

Autopsy: No gross evidence of tuberculosis; 2 small "accessory spleens".

TISSUES (ZA) :- Lumbar, Thoracic, Cervical Levels; medulla.

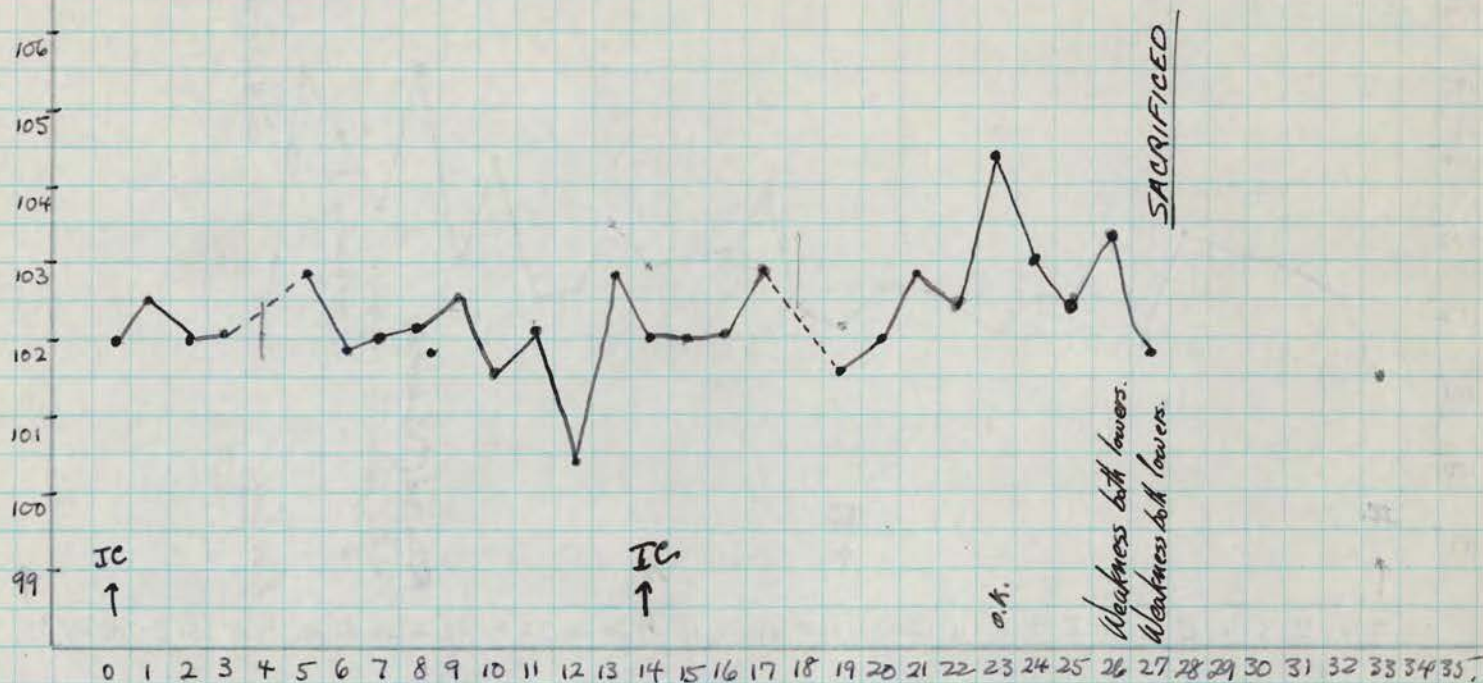
Thalamus; both olfactory bulbs. (also 2 "accessory spleens")

HISTOLOGY: POLIO "old" - with recent changes in lumbar and cerebral cord.

FEB 11 1948

STRAIN - Generation II

Rh. #128 - (normal.)



2-11-48 - Rec. 1.0 cc IC with 20% in saline of Hopking-Gent.

2-25-48 - Re-inoculated IC (opposite side) with 1.0 cc of 20% Hopking virus-Gent.

3-1-48 - Moderate diarrhea noted.

3-8-48 - Weakness both lowers.

3-9-48 - Weakness both lowers. Sacrificed (chloroform-exsanguination) - No tbc.

TISSUE FOR SECTION: Sections of cervical, thoracic, & lumbar cord. (Z-A).

FOR VIRUS: Remainder of cord and medulla, frozen in a tasteroid tube. (C-2)

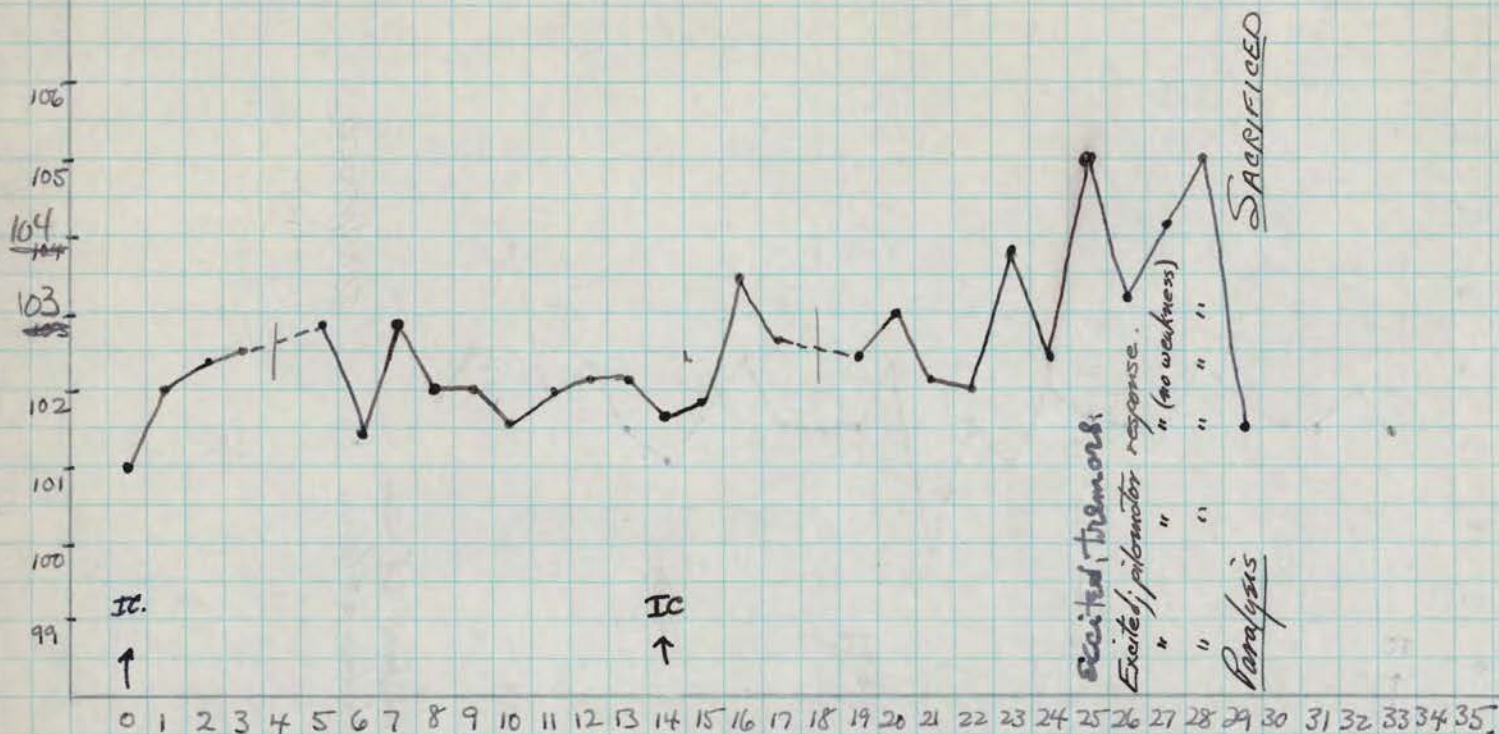
3-11-48: Cord-medulla thawed and pooled with that of Rh #1687 to make a 20% susp. in sterile saline. (See overleaf).

Histology - Polio

FEB 11 1948

STRAIN - Gen. II

Rh. #1687 - splenectomized



2-11-48 - inoc. 1.0 cc IC with Hopping GenT (20% cord in saline)

2-25-48 - Re-inoculated IC (opposite side) with 1.0 cc Hopping virus - GenT

3-7-48 - Excited, tremors, upper eye-lids droopy - ptosis?

3-11-48: Marked pilomotor response. Par. par. right lower. Weakness left lower.

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

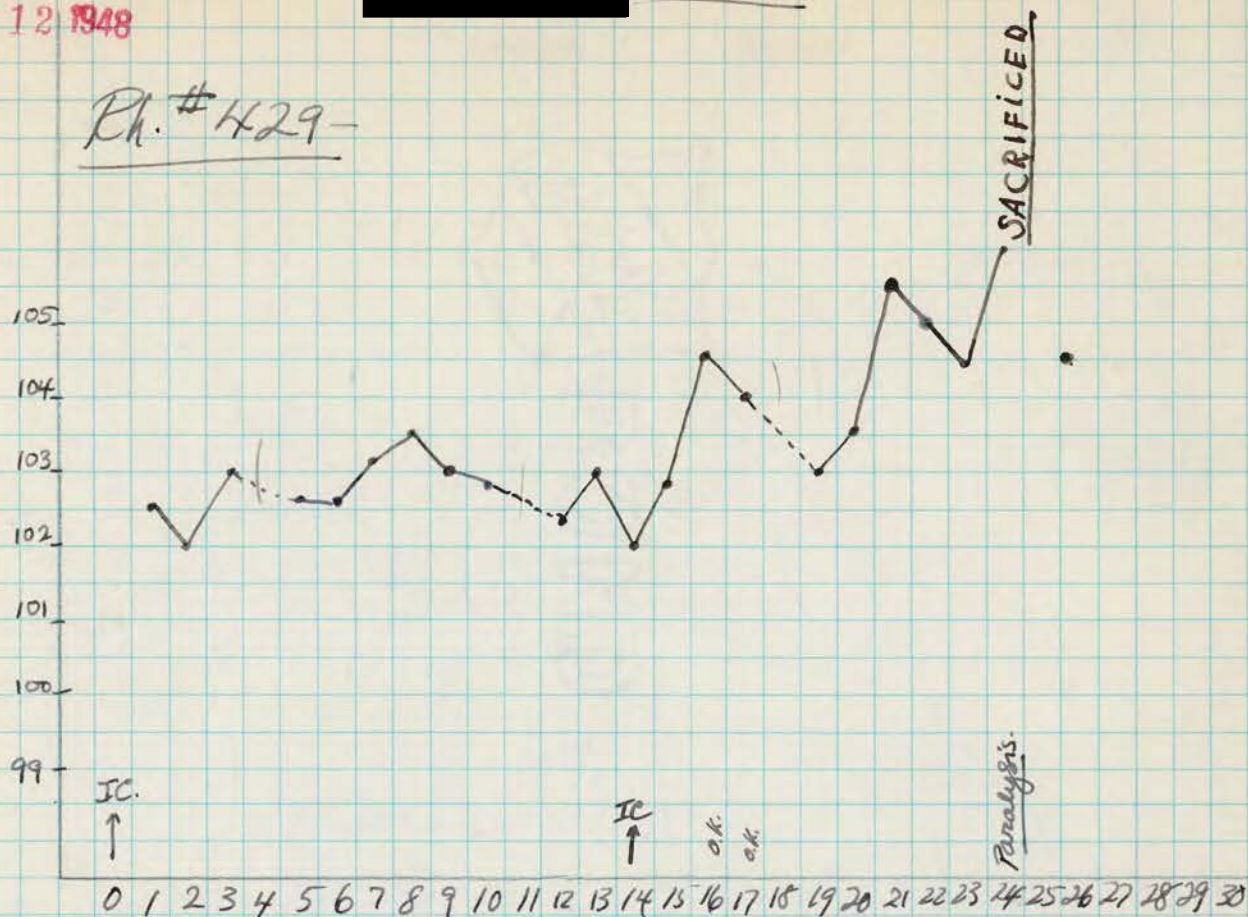
TISSUE FOR HISTOPATHOLOGY: Sections of lumbar, thoracic, and cervical cord taken. (2-A).

TISSUE FOR VIRUS: Remainder of cord and medulla pooled with that of thawed Rh #128 to make a 20% susp. in (42 cc.) sterile saline. Wt. of pooled cords = 10.5 gms. ± 37 cc. frozen in 4-20cc. amps (designated Vials - 1, 2, 3, 4) and stored. (B-2-6)
Culture: ✓✓✓

MAY 12 1948

STRAIN - Generation III

Rh. #429-



5-12-48. (Int. IC. = 1.0 cc 20% in saline) Heppring Virus Gen II.

5-26-48: Re-inoc IC = 1.0 cc 20% in saline " " "

6-5-48 Part. Par of right upper. Weakness of both lower & left upper

SACRIFICED (chloroform - exsanguination) AUTOPSY: no gross the

TISSUE FOR SECTION single section of lumbar & cervical (Z4)

TISSUE FOR VIRUS Remainder of cord & medulla pooled with that of Rh 430 (overleaf) and made up as a 20% suspension in (46%) sterile saline. ± 40° frozen in 4-20 amp. (designated as vials #1, 2, 3, 4) Weight of Pooled cords = 11.5 gms. (B-2-9)

Culture: ✓✓✓

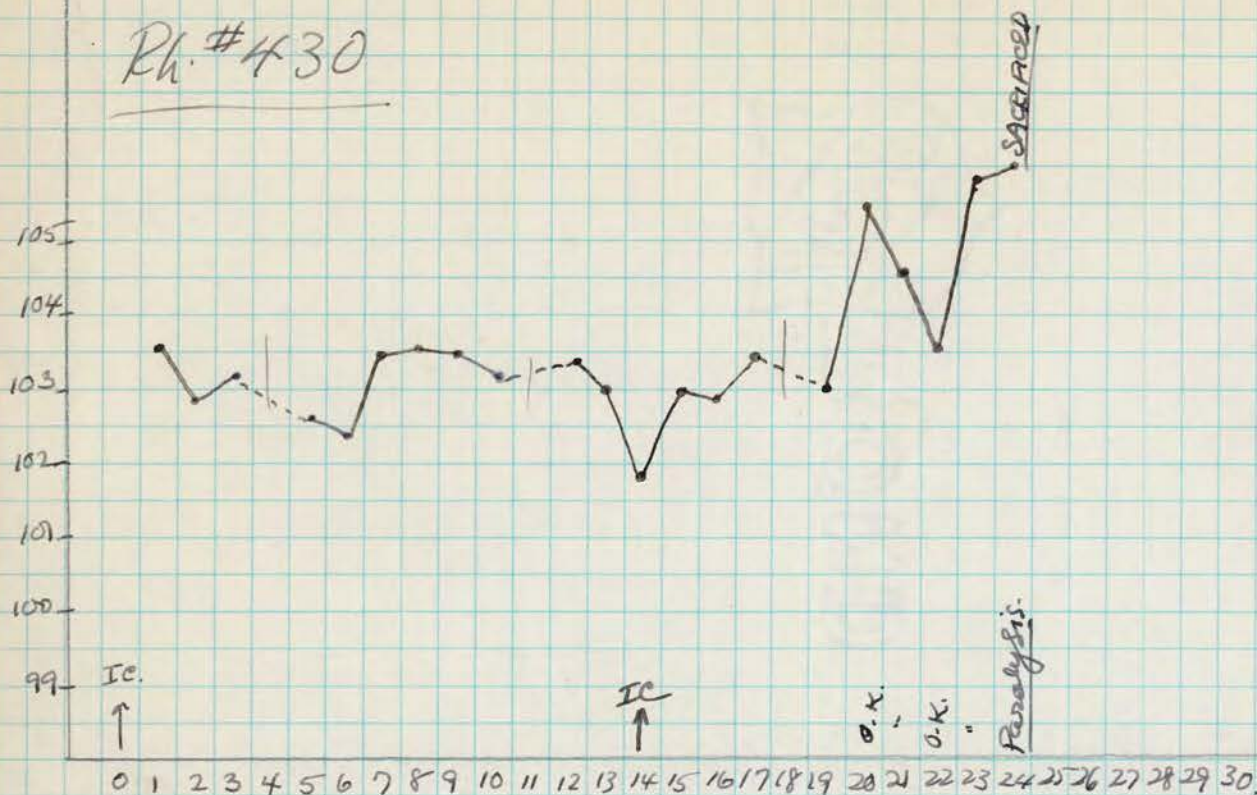
HISTOLOGY: lumbar and cervical cord segments show acute neuronephlegia.

DIAGNOSIS: POLIO (acute)

MAY 12 1948

STRAIN - Generation III

Rh. #430



5-12-48. Over IC with 1.0% 20% in saline. Hopping Virus - Gen II

5-26-48: Re-inoc. IC = 1.0% 20% in saline " " "

6-5-48: - Part. par. Rt. lower; weakness of 3 extremities,
cranial nerves intact. Sacrificed (chloroform-exsanguination),
nucleus Cord pooled with Rh. 429 (see overleaf)

HISTOLOGY: Despite the fact that clinically there was partial paralysis of the rt. lower, the extent as well as the degree of evolution of acute neuronal damage is more advanced in the cervical segment examined than in the lumbar. The latter showing relatively few affected neurones - with chromatolysis and acidophilic intranuclear inclusions - whilst the cervical area shows a number of neurones surrounded by polyblasts.

DIAGNOSIS: POLIO - (acute)

POLIO - 1947 - MONKEY HISTOLOGY.

<u>Rh. #.</u>	<u>Lumbar:</u>	<u>Thoracic:</u>	<u>Cervical:</u>	<u>Medulla:</u>	<u>Midbrain:</u>	<u>Thalamus:</u>	<u>Hypothal.:</u>	<u>Org. Bulbs:</u>	<u>Other:</u>	<u>Diagnosis:</u>
Rh. 4.	NH, Pt.	Nt.	NH, Pt.	0?	-	Nt, Pt.		poor Nt?		<u>POLIO</u>
Rh. 1134	{ NH, Pt also mod. inf. and R.D.!	{ Nt mod. inf.	NH, Pt also mod. inf. Pt.	NH, Pt.	-	Nt, Pt.	Nt, Pt.	?; ?		<u>POLIO</u> ^{old} _{react}
Rh. 128	NH, Pt	-	Nt, Pt.	-	-	-	-	-	-	<u>POLIO</u>
Rh. 1687	NH	Nt.	Nt, Pt.	-	-	-	-	-	-	<u>POLIO</u> ^{age}

GENERATION II

GENERATION III

Rh. 429

Rh. 430