

HETROL
CHALFRO

OCT 2 1948

Heterologous Challenge of Polio Convalescent Monkeys - ✓

Rh. 254 -

convalescent -

Challenged with

VIRUS



OCT 2 1948

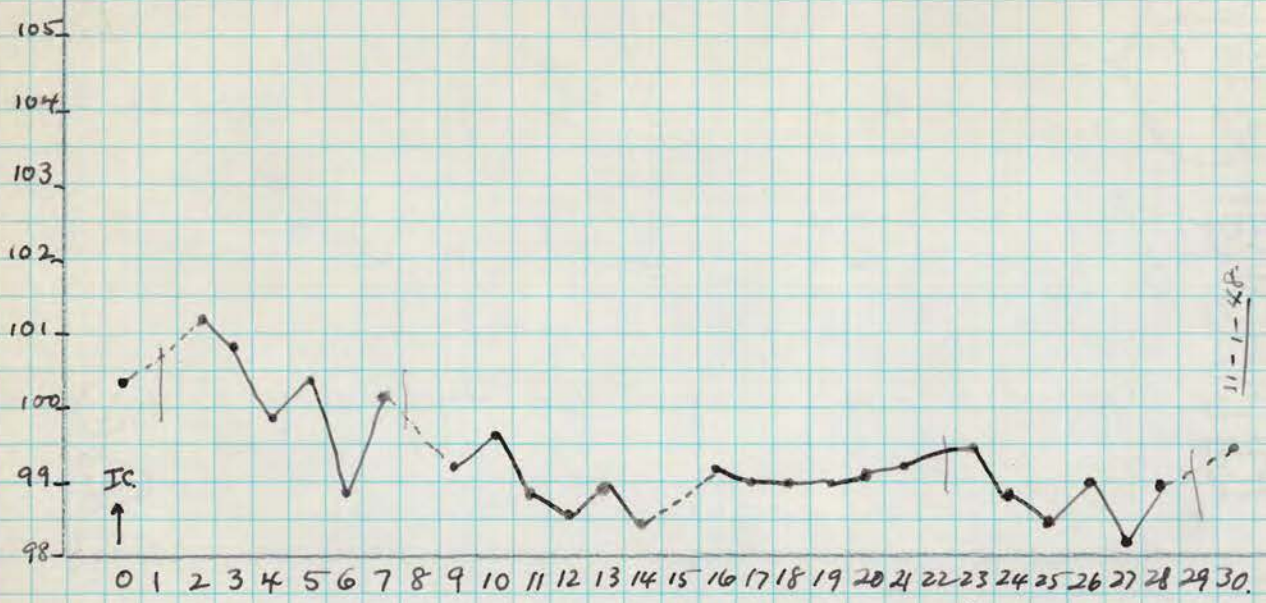
- Challenged by 1cc. inoc. of 0.5 cc of 1:200 [redacted] strain of polio virus, Or. II. (Simultaneous control is Rh. 777X g.v.)

CLINICAL CONDITION WHEN CHALLENGED: Complete paralysis of both lowers which are markedly atrophic; monkey gets around very well with both uppers which show no appreciable weakness or atrophy.

11-2-48. This [redacted] convalescent monkey has shown no clinical change when challenged with 100 PD₅₀ of the heterologous [redacted] virus. Therefore today this monkey challenged with ± 100 PD₅₀ of [redacted] virus (see record.). Rh. 1059 is simultaneous control.

OCT 2 1948 Heterologous Challenge of Polio Convalescent Monkeys.

Rh. # 266 - Convalescent - challenged with virus



OCT 2 1948 - Challenged by vir. inoc. of 0.5 cc of 1:200 strain of polio virus; CMTT. (Simultaneous control is Rh. 777X-9.v.).

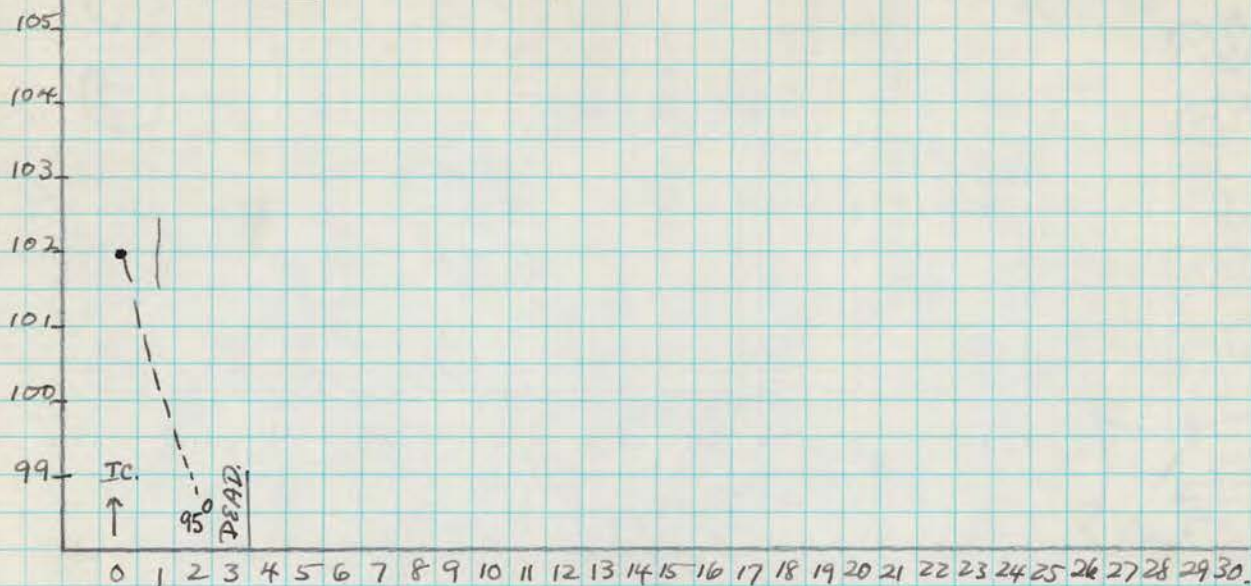
CLINICAL CONDITION WHEN CHALLENGED: Partial paralysis of right upper; weakness of left upper with moderately severe atrophy of both uppers; partial paralysis of both lowers more marked on right, with moderate atrophy of both lowers, especially right. Holds head and neck up well and gets around in cage floor well, and climbs a little with uppers.

10-14-48 Edema of left cheek. 10-16-48 Edema disappeared.

10-28-48 No change in motor status but monkey is getting thinner and running a persistent low temp.-

11-2-48. This animal has resisted homologous virus and shown no change when challenged with 100 PD₅₀ of Hefekamp strain. - Challenged today with 100 PD₅₀ of polio virus. (Rh. 1089 is simultaneous control.) (see record).

OCT 2 1948 Control Monkey - [redacted] virus. - used for the
 Heterologous Challenge of Rh. 254; 266 ([redacted] cowalescents)
 Ph. 777X - (ex Tennantz.v.)



OCT 2 1948 - inoc. i.c. with 0.5 cc of 1:200 [redacted] strain polio virus.
 10-14-48 - T=95°. no diarrhea or cough. monkey very apathetic. bristles about face
 and head and looks as if he has been beaten by cage mates. taken out.
 10-5-48 - DEAD: Autopsy: no gross Tbc.

TISSUES: Thalamus; hypothalamus; midbrain; medulla. - (also single segments of
 spinal cord levels.)

HISTOLOGY: Nothing abnormal except 1) scattered interstitial infiltration of round
 cells in linear arrangement in thalamus (? needle tract), and 2) the
 blood filling within a pial vessel in ventral aspect of medulla is full of
 white blood cells (? due to post mortem ?? change), and of these cells the
 majority are polys--

DIAGNOSIS: - NO EVIDENCES OF POLIO

NOV 2 1948 Heterologous Challenge of Polio Convalescent Monkeys -

Rh. 257 - [redacted] (also unaffected) - Challenged with [redacted] virus
 convalescent (by [redacted] virus)



NOV 2 1948 - Challenged by IC wa. of 0.5 cc of 1:20 [redacted] strain polio virus, (Gm II), simultaneously with Rh. 266 and the control, Rh. 1089 (g.u.).

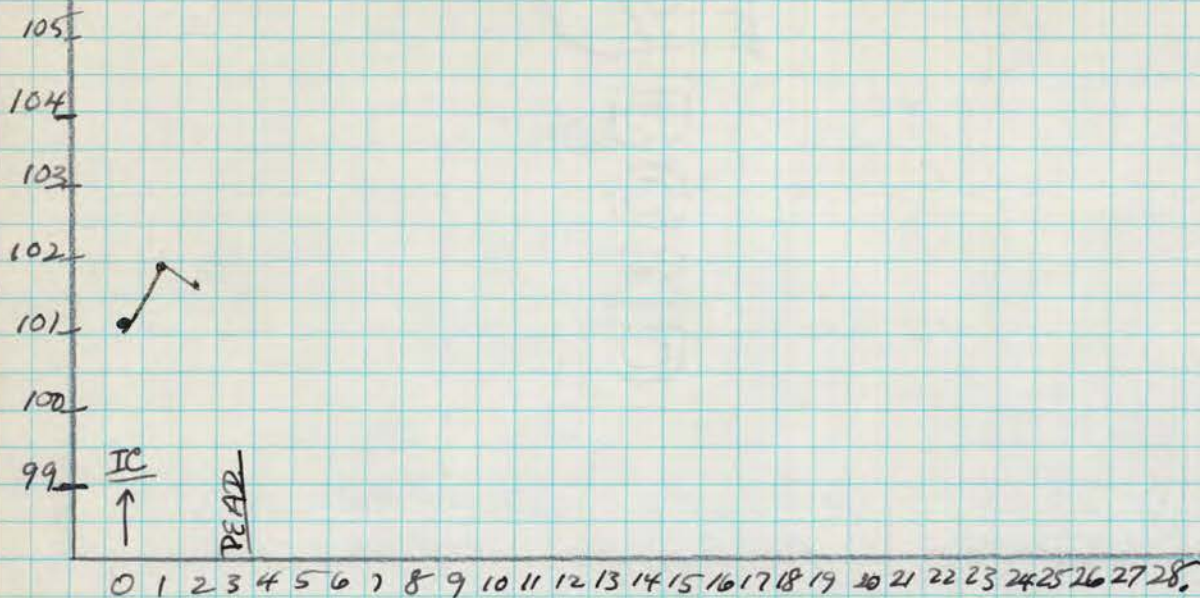
CLINICAL CONDITION AT CHALLENGE: Complete paralysis of both lowers which show marked atrophy. The uppers are well used in climbing and show neither weakness or atrophy.

DEC 6 1948 Challenge with MV virus
 Having been unaffected by above challenge with [redacted] virus, ^{after 36 days} This monkey was wa. IC with 1.0 cc of 1:50 MV virus.

DAY TEMP
 0 103.4
 1 105.2
 2 104.3
 3 105.2 O.K.
 4 105.2 face flushed; mild head and body tremors
 (12-11-48) 5 104.8 Partial par. both uppers; head drop; will not climb; coarse tremors of head and body.
Sacrificed: (chloroform - exsanguination)
Autopsy: no gross the
TISSUE FOR SECTION 4 medulla & cervical 2 thoracic and 7 lumbar cord (Z.A.)
HISTOLOGY: Much neuronal outfall with PV and interstitial foci of glial cells; There is however only a very occasional root showing signs of remaining degeneration. - The medulla shows very extensive coarse PV cuffing and interstitial gliosis.
 In addition to these "old" changes, and more marked in cerebral than in lumbar region - are areas of acute early neurophagia, with numerous poly- chiefly in the commissural and dorsal nuclei. - No positive foci of acute neurophagia are seen in the medulla.
DIAGNOSIS: POLIO "old" and "acute"

NOV 2 1948 Heterologous Challenge of Polio Convalescent Monkey

Rh. 266 [redacted] (also unaffected) - Challenged with [redacted] virus.
[redacted] Convalescent (by [redacted])



NOV 2 1948 - Challenged by IC vir. of 0.5 cc of 1:20 [redacted] strain of polio virus (Gen II), simultaneously with Rh. 254 and with the control Rh. 1059.

CLINICAL CONDITION AT CHALLENGE: Part. par. of rt. upper - weakness of the left upper with mod. severe atrophy of both uppers; partial paralysis of both lowers with mod. atrophy R > L. Can hold head up well; neck and back seem O.K. - However monkey has been getting thinner, runs a low temp. (p.v.) frequently and has had facial edema intermittently.
11-3-48. Is so easily exhausted that he lies down at every opportunity; he is very much thinner.

11-4-48. Thinner; disinterested; holds head up when placed into sitting position in corner; showing progressive general weakness.

11-5-48 DEAD: - Autopsy: severe emaciation; no fat depots.

Dissect: Thalamus; midbrain; 2 medulla; 9 cervical; 4 Thoracic; 5 lumbar. (Z.A.).

HISTOLOGY: No acute neuronal changes. Cord levels show root degeneration; some dissolution of cent. horn substance; glial infiltration; medulla shows very mild glial infiltration, which is more extensive in Thalamus.

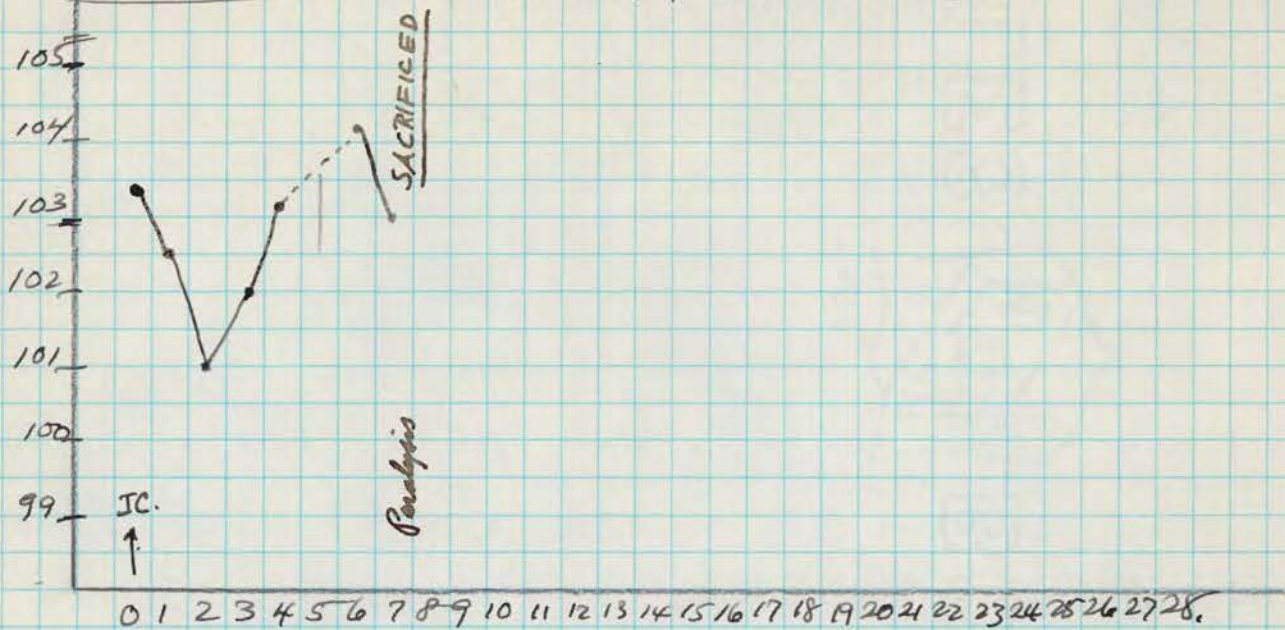
DIAGNOSIS: POLIO ("old")

NOV 2 1948

Control

Viruses - (±100 P₅₀)

Ph. 1089 - Control for Heterologous Challenge of Ph. 254 and Ph. 266.



NOV 2 1948 Inoc. I.C. with 0.5 cc of 1:20 [redacted] strain of polio virus to serve as control for the simultaneously inoculated Ph. 254 and Ph. 266.

11-9-48 T=103°. Partial Analysis of all 4 extremities, weakness of neck and back.

SACRIFICED (chloroform-exsanguination)

AUTOPSY! No gross etc

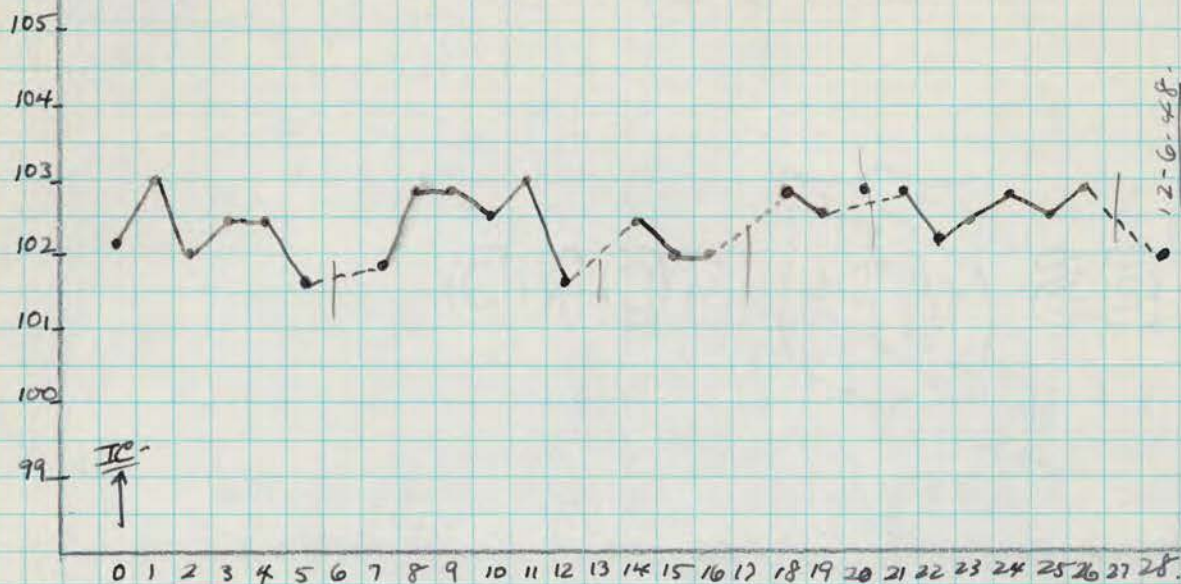
TISSUE FOR SECTION high segments of lumbar and cervical cord (etc)

11-19-48 tissues discarded

Ph. 699.

convalescent

Challenged with



NOV 8 1948 Inoc IE with 0.5 cc of 1:200 [redacted] strain polio virus (6911) representing 100 PD₅₀. - Ph. 884 X - (overleaf) is the simultaneous control for Ph. 699 - and also for Ph. 684, 682, 685 (who are RicE convalescents) - and Ph. 631 and Ph. 1931 (who are Risner convalescents).

CONDITION AT CHALLENGE: Compl. paralysis left lower; part. par. of rt. lower. There is mod. severe atrophy of both lowers. Weakness of rt. upper with mild atrophy present. Clen'ts well; gets excited easily.

DEC 6 1948

Challenge with MV virus.

Having been unaffected 28 days after challenge with [redacted] virus (above) this monkey was challenged today with IC inoc. of 1.0 cc of 1:50 MV virus.

DAY TEMP

0	102°
1	102 1/2
2	102 1/2
3	102°
4	105 1/2 U.K.
5	105° O.K.
6	104 1/2
7	103 1/2
8	102 1/4
9	102 1/2
10	101 1/2
11	102
12
13	101 1/2
14	102 1/2
15	102°
16	102 1/4

U.K.

O.K.

Coarse tremors, head and body.

Bilateral ptosis; coarse tremors; mildly excited.

Fleps over easily; will not climb; now has weakness left upper; bil. ptosis; coarse tremors.

Same.

Same plus the weakness in left upper is more marked. - Tremors persist.

No change

"

No change

"

"

NO change; tremors persist (looks as if he would probably survive.)

12/22/48. - Observation terminated. Monkey discarded.

NOV 8 1948

Control Monkey - Receiving 100 PD₅₀

Strain Polio Virus.

Ph. 699

conval. (overleaf)

Ph. 884X (used in test) previously g.v. Control for

Ph. 654

convalescents

682

g.v.

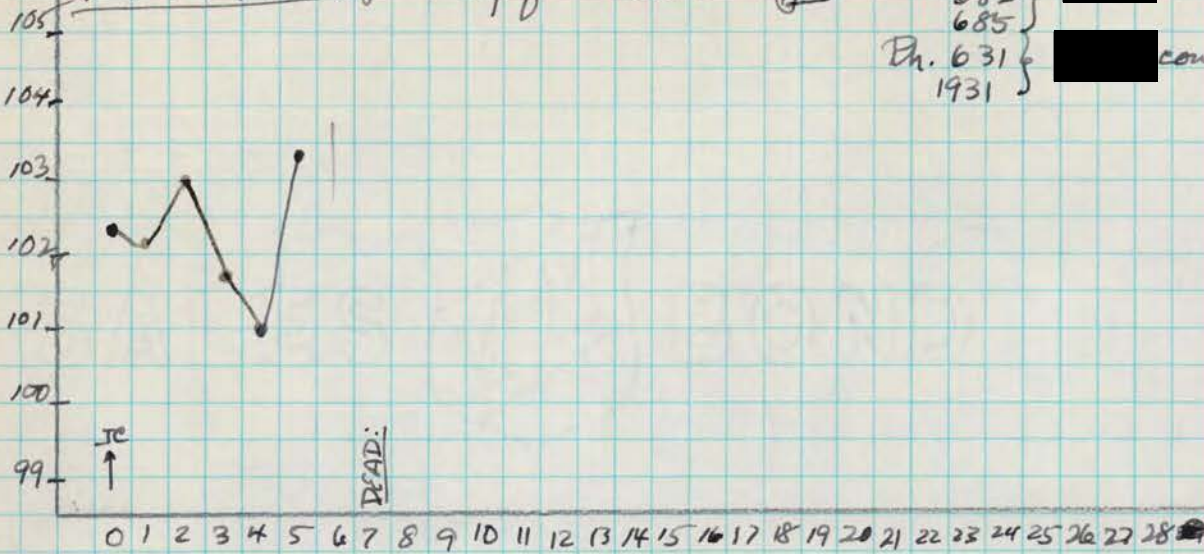
685

Ph. 631

convalescents

1931

g.v.



NOV 8 1948

rec. Tc with 0.5 cc of 1:200 polio virus (Cont II),
representing 100 PD₅₀. Simultaneously inoculated the 6 convalescent
monkeys listed above.

11-15-48 (7th day) - Found dead in a.m.; still warm to touch; had
shown no paralysis in life.
Autopsy: no gross TBC.

TISSUES: Thalamus, midbrain, 2 medulla; 7 cervical; 2 Thoracic,
and 5 lumbar cord segments. (Z.A.)

HISTOLOGY: Spinal cord levels and medulla show acute early neuronophagia;
midbrain and Thalamus show only slight PV cuffing. -

DIAGNOSIS: POLIO ("Acute")