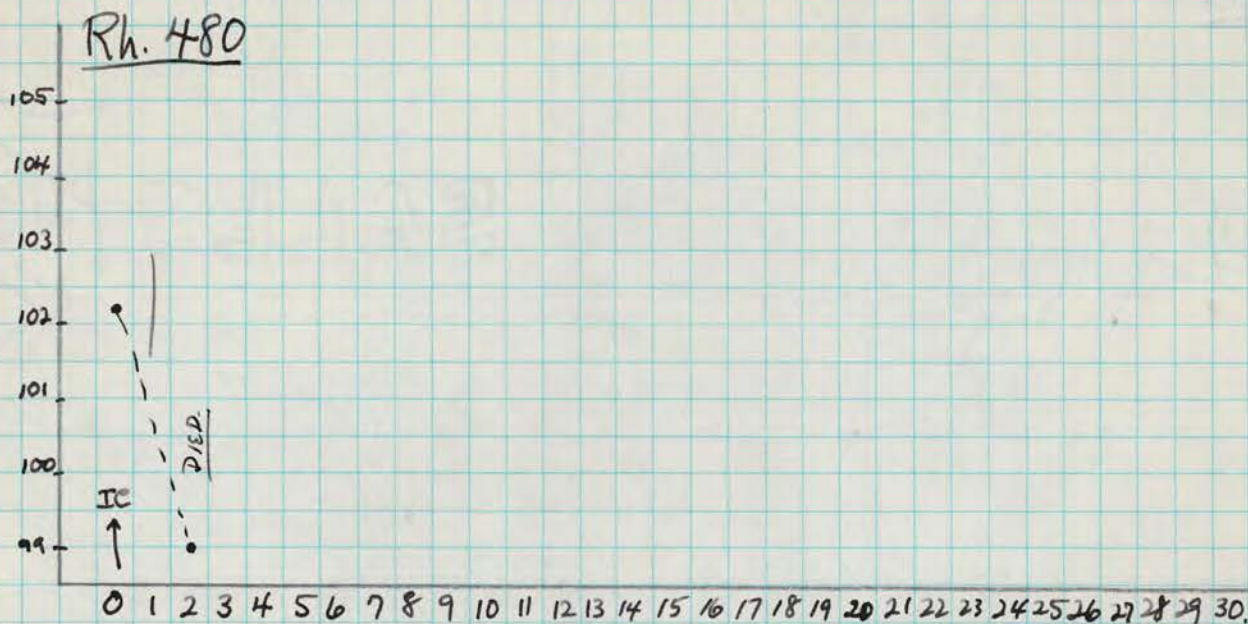


HMO-  
challenge

Challenge Re-inoculation with Homologous Virus (Poli)  
to [REDACTED] Convalescent Monkeys.

AUG 21 1948



AUG 21 1948 - Challenged by inoc. into Right frontal lobe of 1.0 cc of [REDACTED] polio virus (20% in saline), Generation II; simultaneous control monkey is Rh. 731 (g.v.). - Date original inoculation was 5/21/48.

CLINICAL CONDITION AT TIME OF CHALLENGE: complete paralysis of both lower; almost complete of left upper (moves head of humerus), and a partial paralysis of right upper; can sit up for a few minutes at a time and can feed self slowly. There is extensive atrophy of all limbs and of lower trunk.

8-22-48. No change.

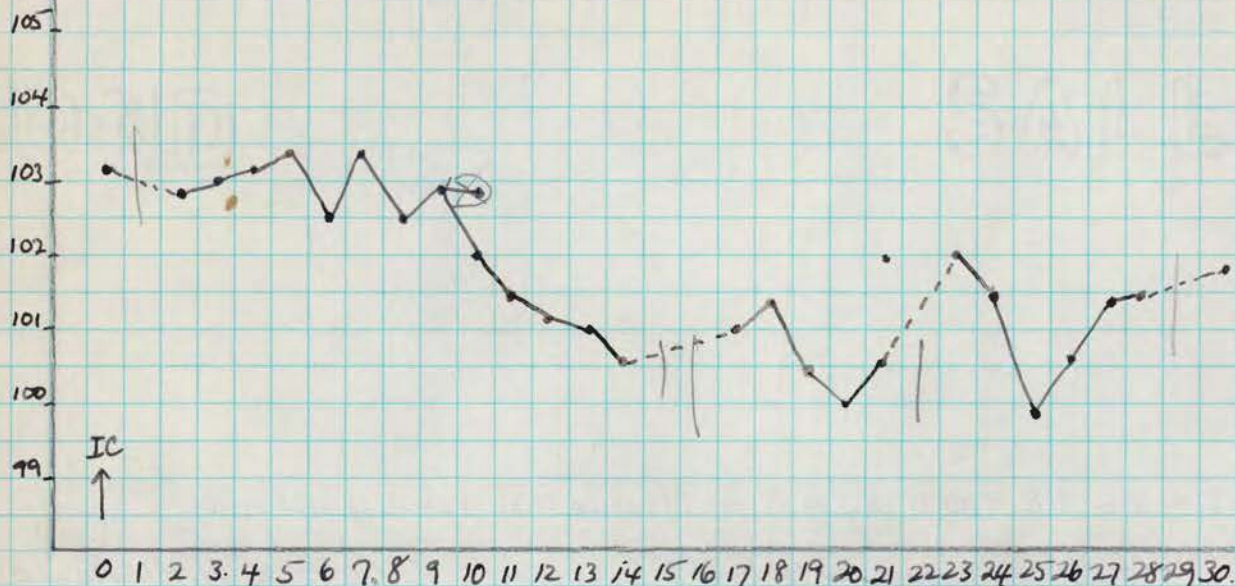
8-23-48. T=99°; monkey seems moribund; pale, will hardly close eyes when corneas are stimulated, breathing is shallow and irregular; will not attempt to take proffered food between teeth. - Died at 2<sup>00</sup> pm. - Autopsy: emaciated with very marked muscular atrophy of neck, trunk and all extremities. - Lungs show patchy atelectasis; no pericardial or myocardial puncture can be found to denote site of bleeding done 2 days ago (8-21-48) prior to inoculation.

TISSUE FOR SECTION: cord levels with roots; medulla; midbrain; thalamus. (2.A)  
(tissue extremely soft and pulsatious to ant. Horns of sev. sections are "vacuolated")

HISTOLOGY: Spinal cord shows in all three areas root degeneration, neuronal loss; glial interstitial infiltration - diffuse as well as dense nodules. Medulla - shows only scattered interstitial glial infiltration. midbrain and thalamus - same as medulla -; no perivascular cuffing remains from the "old" polio changes; no acute neuronal changes.

DIAGNOSIS: Polio. "old"

Rh. 482



AUG 21 1948 - Challenged by ino. into Right frontal lobe of 1.0 cc of [redacted] polio virus (20% in saline) Generation II; simultaneous control monkey is Rh. 731 (g.v.). Date original inoculation was 5/25/48.

CLINICAL CONDITION AT TIME OF CHALLENGE: - complete paralysis of left lower; partial paralysis of rt. lower; monkey gets around outdoors quite well largely by use of uppers; - mld diarrhea is present. - There is extreme atrophy of left lower; somewhat less marked atrophy of rt. lower; lower back muscles (Erector spinae) moderately atrophic.

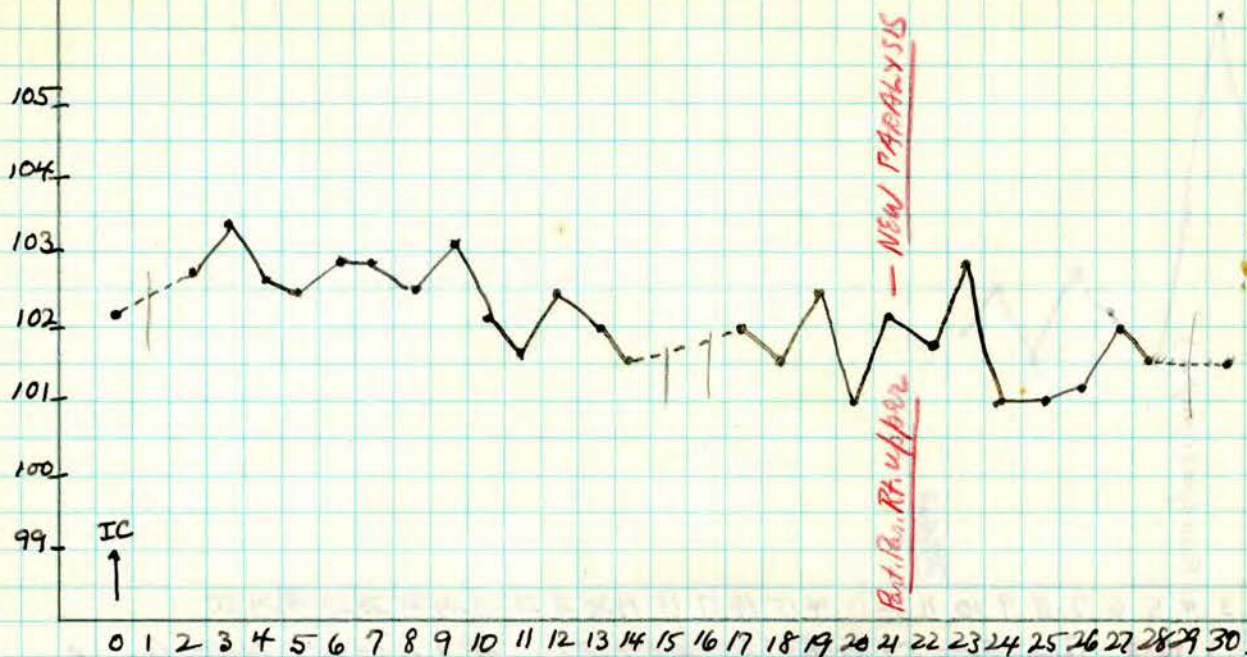
10-2-48 Heterologous Challenge with [redacted] virus. (see record).

AUG 21 1948

## Challenge Re-Inoculation with Homologous Virus (Polio)

convalescent

Rh. 498



AUG 21 1948 - Challenged by virus into Right frontal lobe of 1.0 cc of [redacted] polio virus (20% in saline), Generation II; simultaneous control monkey is Rh. 731 (g.v.). - Date original inoculation was 5/21/48.

CLINICAL CONDITION AT TIME OF CHALLENGE: complete paralysis of both lowers and partial paralysis of left upper; monkey scampers around outdoors very actively by use of uppers. - Atrophy of both lowers - but more marked in left lower; no appreciable atrophy of uppers but mild atrophy of left upper. Right upper seems entirely normal.

9-11-48. Partial paralysis of right upper now present!; There are no signs of injury of any kind to the right upper; monkey is alert, and not generally ill or weak.

9-12-48. Almost complete paralysis of rt upper now with wrist motion preserved and adduction of upper arm possible. Otherwise unchanged.

9-13-48 No change. - 9-14-48. - Right upper unchanged except now he able to partially flex forearm - i.e. rt. upper is already showing some improvement.

9-15-48 - no change. - 9-16-48. - no change; 9-17-48 - no change. (9-19-48 - No change; seen by (ABD) for first time today who pointed out importance of confirming acute polio developing in a convalescent monkey challenged by homologous virus, by attempt to isolate virus and to search for acute lesions.)

10-3-48. There has been no change at all. 10-5-48 - Compl. par. both lowers persists; partial par. of left upper (almost complete) persists. - right upper which was almost completely paralyzed shows some movement as noted above i.e. flex forearm, and slight shoulder movement. 10-10-48 - NO change; there is rather marked atrophy evident in rt. upper, as well as other 3 extremities.

10-15-48. No change. - 10-18-48 More bad - monkey is gasping irregularly, very cold; heart action barely perceptible.

Bled by cardiac puncture 16 cc. (serum stored); and then perfused with 500 cc normal saline with the cannula just through the mitral valve into the aorta; - then perfused with 2000 cc of 10% Formol with 1% acetic acid. (Good fixation obtained)

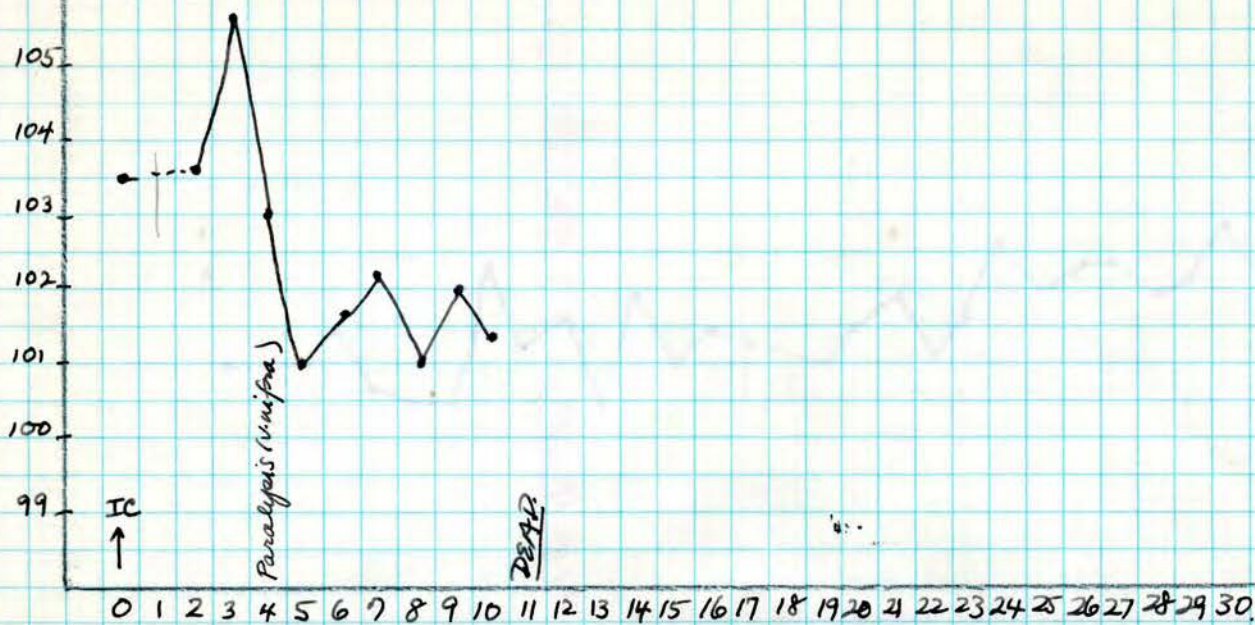
Brain and spinal cord (with roots) removed and placed in above formol solution; then several tissues into Z-A; remainder held in formol.

TISSUES INTO Z-A: 2 levels each of cervical and lumbar cord; also of medulla and midbrain (A.B.S.).

AUG 21 1948

Control Monkey Used Simultaneously with Challenge  
Reinoculation of [redacted] Cavalescents (Poli)

Rh. 731 - Control for Rh. 480; 482; 498.



**AUG 21 1948** - Inoculated (right) frontal lobe with 1.0 cc of [redacted] poliovirus (20%), Generation II. This monkey is control for the challenge of Rh. 480; 482; 498.

8-24-48. - A.M. T=105° - O.K. except for mild diarrhea.

8-25-48 - complete paralysis rt. lower; partial paralysis of other 3 extremities; aphonia; mild head tremors; weakness of back & neck.

8-26-48 - Complete quadriplegia and aphonia.

8-27-48 - No change. 8-30-48 - No change.

9-1-48. Dead - Autopsy - no gross TBC.

TISSUE FOR SECTION: lumbar and cervical cord segments. (Z-A.)

11-19-48 tissues discarded