October 19, 1939

Dr. W. O. Ramey
Carew Tower
Cincinnati, Ohio

Dear Bill:

I am enclosing herewith our report on [redacted]

While the analytical findings are higher than the mean for normal individuals, they are not within the ranges that we would anticipate were plumbism actually responsible for the production of this man's illness.

On the basis of the clinical examination, it is our impression that this man's disability is due to a radiculitis of the cervical nerves involving mainly the fifth and sixth cervical segments. The fact that the motor phenomena predominate suggests the possibility of an intrinsic lesion within the spinal cord and further clinical studies would be indicated if one wished to establish a more precise diagnosis.

Thank you for referring this case to us.

Cordially,

WM:vr

Willard Machle, M.D.

October 17, 1939

[redacted] - 79

Room 440 - Christ Hospital

Consultation requested by Dr. W. O. Namey

History — Patient is a deaf mute 79 years of age suffering from wrist drop and paresis or paralysis of both of scapulo-humeral muscle groups. Mental changes of senility limited history to that of P.I.

I.H. — Has worked most of the time as painter, 14 years in a carriage manufacturing company - the past 13 years for a sheet metal specialities company. Date of last employment as a painter, November, 1936. While at carriage plant used considerable amounts of naphtha as a turpentine substitute and throughout the period as a painter used lead paints and did paint mixing with dry pigments as required.

P.M.H. — Incomplete. Since 1890 there has been stiffness of the neck. In past 5 to 10 years there has apparently been complete fusion of cervical vertebra as no great change in degree of immobility has been noted in that time.

P.I. — Beginning in 1937, after some 40 years of spinal arthritis, there began weakness in hands and arms accompanied by severe, shooting, knife-like pains running from the neck into the arms and forearms. These last have become increasingly worse as has the weakness, the pains being much more severe this year and seemingly of increasing frequency, though due to the limitations of the recording, quantitative information could not be obtained. Since onset, weakness, numbness, itching and formication of the skin of the arms and forearms has been frequent, especially in the past year.

Local Examination

Pronounced atrophy with extreme paresis or motor paralysis of scapulo-humeral muscle groups, the forearm muscles and the intrinsic muscles of the hand. Motor paralysis of the extensors of both wrists and fingers and complete failure pronation right arm which is otherwise also most affected. Trapezii are extremely weak, and deltoids, especially right, seem paralyzed. All effected muscles are tender to pressure, vermicular and fibrillary tremors are occasionally in evidence, especially in adductors of thumb where they are almost constant. Adduction of thumb is poor, abduction slightly impaired. Flexion of fingers variable and weak in all. Right fourth finger stronger while index finger exhibits best flexion in left hand. Interossei are wasted, finer movements of the hand absent.

Sensorium is not greatly disturbed except for areas of hyperaesthesia on both arms over 5-6 cervical segments. There is static and locomotor ataxia, but walking is possible with assistance. Muscular apparatus, trunk and lower extremities are not remarkable.

Laboratory

See attached record

Impression

(1) Hypertropic spinal arthritis with fusion of cervical vertebrae.

(2) Traumatic cervical and brachial radioulitis with muscle atrophy chiefly of radicular distribution.

(3) The course of the illness, the absence of history or clinical evidence of lead intoxication and the laboratory findings lead us to believe that plumbism played no role in the production of this man's illness.

Willard Machle, M. D.

[redacted]

79-year-old patient at Christ Hospital examined by Dr. Millard Machle on October 17, 1939.

Urine

Analysis No. 39A-3735

Volume - 65.0 ml

Mgs Pb/Liter - 0.10

Blood

Analysis No. 39A-3736

Grams - 2.8

Mgs Pb/100 gms- 0.115*

*Because of the smallness of sample any possible slight contamination introduces large errors when the results are calculated on a basis of a 100 gm sample.

Reported: 10-19-39