Case Records
of the
Massachusetts General Hospital

ANTE-MORTEM AND POST-MORTEM RECORDS AS USED IN WEEKLY CLINICO-PATHOLOGICAL EXERCISES

EDITED BY

RICHARD C. CABOT, M.D., AND HUGH CABOT, M.D.

F. M. PAINTER, ASSISTANT EDITOR

CASE 10171

An unmarried American cook of forty entered October 1 in coma. The history was given by friends who saw her about once a month.

F. H. Both parents died in old age, possibly of apoplexy. There was no heart or kidney trouble in the family.

P. H. She had had no complaints up to the time her friends last saw her, ten days before admission.

Habits. Good.

P. I. After showing no signs of previous trouble she was found lying unconscious on the kitchen floor.

P. E. An obese woman in coma, with stertorous breathing, at times Cheyne-Stokes. Mucous membranes pale. Teeth all gone. No evidence of facial or ocular paralysis. The left arm was raised constantly to her head. The right arm was flexed at the elbow and the hand at the wrist, and was held rigid; she moved it, however, at times. She also moved her legs. When pinched or otherwise irritated she moaned and at times moved her extremities. No head injury was made out. No discharge from nose or ears. Apex impulse of the *heart* indefinitely felt in the fifth space outside the nipple line, 6¾ inches to left of midsternum, corresponding with the dullness. No enlargement to the right or substernally. Action normal. First sound at apex short and sharp. A_2 a little accentuated and ringing. Pulses very high tension. Walls not sclerosed. *B.P.* 240. Nothing abnormal found in *lungs* or *abdomen*. *Extremities* not recorded. *Pupils* very small, regular, left somewhat larger than right. No reactions. *Reflexes.* Knee-jerks lively and equal. Double Babinski. No clonus or Kernig.

T. 96.9°-101.5°. *P.* 63-85. *R.* 24-29. *Urine.* Amount not recorded, sp. gr. 1.014, a trace of albumin, strong reaction to Fehling's; no sediment obtained on centrifugalization.

The patient continued in deepening coma. The extremities became flaccid and motionless. She died from respiratory failure the day of admission.

DISCUSSION

BY DR. RICHARD C. CABOT

NOTES ON THE HISTORY

The essential facts here are: an obese woman in coma, sterterous breathing, Cheyne-Stokes breathing, teeth all gone, no evidence of facial or ocular paralysis. The left arm was raised constantly to the head, the right arm flexed at the elbow and the hand at the wrist, and both held rigid. She moved it however at times, also her legs.

The apex impulse is about 16 cm. from midsternum, which in an ordinary woman would mean a pretty big heart.

DIFFERENTIAL DIAGNOSIS

The main facts are: hypertension, big heart, sudden coma, with normal urine aside from the Fehling test, which in coma we get so often that I do not think we can pay much attention to it in a patient who has had no history of diabetes before. I do not see that they tested for the acid products. In the absence of any knowledge about that the obvious diagnosis seems to be cerebral hemorrhage rather than uremia, cerebral hemorrhage based on chronic nephritis or on hypertension without nephritis.

The evidence of nephritis is not good, but such a blood pressure as this goes more often with nephritis than with other things, in case it is not produced by the coma itself. We cannot swear of course that it is not produced by the coma itself.

A brain tumor might have remained wholly latent until there came a hemorrhage into its substance, as we get so often in the gliomata; that might give all the evidence of hemorrhage with a high blood pressure as well. But that would not account for the enlargement of the heart, and I think we have evidence of enlargement of the heart. Therefore the blood pressure is not due to cerebral conditions, therefore it is, probably, due to nephritis. We do see high blood pressure, as high as this, in women of forty without any evidence of chronic nephritis, but I never saw one come to necropsy.

So I think this is chronic nephritis, with hypertrophy and dilatation of the heart, cerebral hemorrhage going into the ventricles or into the base of the brain or into the frontal lobes so as not to give a distinct paralysis.

A PHYSICIAN: Isn't it unusual to have that kind of nephritis in the obese?

DR. CABOT: I think not.

A PHYSICIAN: My picture of the chronic nephritic is that of a lean, lanky, pale type of person.

DR. CABOT: I have not that impression. Certainly hypertension is commoner in fat people than it is in thin.

A PHYSICIAN: You say it is not uncommon in a terminal affair like this to get sugar in the urine?

DR. CABOT: Any coma, so far as I know, often gives sugar in the urine. All the books on diabetes call attention to that.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Cerebral hemorrhage.
Chronic nephritis.

DR. RICHARD C. CABOT'S DIAGNOSIS

Chronic nephritis.
Hypertrophy and dilatation of the heart.
Cerebral hemorrhage.

ANATOMICAL DIAGNOSIS

1. *Primary fatal lesions*

Hemorrhage (spontaneous) of the brain, (basal ganglia, left).
Multiple focal hemorrhages of the pons.
Sclerosis of the cerebral arteries.

2. *Secondary or terminal lesions*

Slight dilatation of the heart.
Multiple hemorrhages of the lungs (parenchymatous).
Slight edema of the lungs.
Enlargement of the spleen.
Acute passive congestion of the kidneys.

3. *Historical landmarks*

Hydrosalpinx.
Corpus hemorrhagicum (unruptured).
Obesity.

DR. RICHARDSON: An obese woman, forty years of age, with arteriosclerosis and hypertrophy and dilatation of the heart. The heart weighed 440 grams. The kidneys showed congestion. The organs in the trunk were otherwise negative.

In the head was well marked arteriosclerosis of the vessels of Willis and an extensive hemorrhage on the left, with marked hemorrhagic disintegration of the basal ganglia on that side, and multiple focal hemorrhages in the pons.

DR. CABOT: There is nothing wrong in the kidneys except congestion. That seems to me very interesting, because this is one of the cases where we can say, This is Allbutt's *hyperpiesia* or essential hypertension which has not affected the kidneys, which we cannot say is due to arteriosclerosis I think, and which ends in a cerebral hemorrhage. For her size would you say that that enlargement of the heart was moderate or considerable?

DR. RICHARDSON: For her height, five feet seven inches, and her obesity I should say it was moderately enlarged.

DR. CABOT: It is unfortunate that we do not know anything in regard to the question of hypertension before she became comatose. We cannot swear it was not there.

DR. RICHARDSON: Not according to the report.

A PHYSICIAN: Was a Wassermann done in this case?

DR. CABOT: It is not recorded here, and I think it is usually recorded when it is done. This case was probably before Wassermanns were done as a matter of routine.

That question of whether arteriosclerosis itself causes hypertension has been discussed a good deal. I think the best evidence is that it does not.

A PHYSICIAN: Of course the hypertension could be associated with the hemorrhage.

DR. CABOT: Perfectly, all of it. But then we should not have accounted for the heart. We do not know the diastolic blood-pressure. I have no doubt it was high.

CASE 10172

An Irish housewife of thirty-five entered December 17.

F. H. Good.

P. H. Negative except for measles in childhood, pneumonia and pleurisy.

P. I. Three weeks before admission she had a miscarriage preceded by a vaginal flow of blood clots for four days associated with pain. She was operated upon at home to complete the miscarriage. Since the operation she had had almost daily vomiting, especially in the morning, diarrhea and pain associated only with retching. Her last menstrual period was September 14.

P. E. A poorly developed and nourished, tired looking, somewhat depressed woman. A shallow tender ulceration on the inner side of the lower lip directly in contact with several of many carious, apparently abscessed teeth. Pyorrhea. Apex impulse of the *heart* and percussion measurements not recorded. Systolic murmur heard all over precordia, best over the