

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

A Case of Paralysis with Aphasia occurring on the Fifth Day after Parturition—Death and Post Mortem. By JOHN REDDY, M.D., L.R.C.S.I., &c., Physician to the Montreal General Hospital, &c.

I wish to supplement a paper read by me before the Medico Chirurgical Society of Montreal, on the 9th March last, on Paralysis with Aphasia, (when I gave the history of four cases,) by recording another case which has since come under my charge, and which I deem of sufficient interest to lay before your readers, particularly since, as it terminated fatally, I had an opportunity of verifying the diagnosis by a post mortem. It bears a most striking resemblance in some of its pathological features to Case No. 1 in my former paper.

Mrs. M., aged 45, of middle stature and spare habit, I confined on the 17th April, 1872, of a large male child. The labor was of short duration, terminating favorably—(this was her seventh labor). On the second day she remarked that before her confinement she had been much troubled with a cough which had now nearly altogether subsided. On the third day the breasts were well filled and the child nursed freely; she appeared in good spirits, nor did anything unusual arise to affect her perfect recovery till the morning of the 22nd (or fifth day), when, on my arrival, the nurse informed me that some short time previously she awoke, as if in a fit or dreamy fright; her face was quite distorted; the ability to speak or sit up being absent; that when the fright had subsided she was seized with coughing, and forced up quite a quantity of thick saliva which flowed from her mouth; up to this moment she appeared to be doing well, and had spoken to her a short time previously. I found her lying on the right side, partially propped up in bed; thick, glairy mucus, in a long string, flowing from the right side of her mouth. The face and right

side of body hemiplegic; her pulse 78, and temperature 98.25; she was also aphasic, with the exception of answering "no" or "yes," intelligently, to leading questions; could swallow, but not freely; her breathing was peculiar, and apparently somewhat oppressed; the face had a peculiar, bluish tinge, and the right jugular was very full and tense; bowels had been freed the day previously with castor oil; the lochia were correct, but the milk had considerably diminished; had frequent coughing fits, and ejected quite a quantity of glairy, transparent mucus, free of air; percussory sounds were much clearer than natural all over the chest; heart's action: first sound slightly below par, second regular, no murmur existing; subcrepitating rales heard all over the chest, anteriorly and posteriorly, occupying about the first two-thirds of inspiration, which had a prolonged character; expiration was short, sudden and quickly accomplished. I may mention here that partial emphysema of both lungs had existed for some years back, and I have had frequently to attend her for severe attacks of bronchitis, when she had that characteristic breathing and cough that peculiarizes asthma; the urine was normal in color and quantity, and did not contain albumen; tickling the sole of the foot on paralyzed side produced active reflex movements; no muscular rigidity was present.

From the above symptoms and signs I at once came to the conclusion that obstruction of the right side of the heart existed, (probably pulmonary artery); also, that an embolus, no doubt, occupied the middle and, possibly, anterior cerebral arteries of left side.

Treatment consisted in: Turpentine epithems to be applied every fourth hour to the chest; during the intervals, hot linseed poultices, to which a small quantity of mustard was added; the patient's body to be raised against pillows to relieve the dyspnoea, and to give a tablespoonful of the following mixture every fourth hour: \mathcal{R} Bromidi Potass, $\mathfrak{z}\mathfrak{j}$; Iodide Potass, gr xxxvi; Chloroform, $\mathfrak{z}\mathfrak{j}$; Ext. Polygal Senegæ Fluid, $\mathfrak{z}\mathfrak{j}$; Aqua: ad $\mathfrak{z}\mathfrak{v}\mathfrak{j}$; diet, milk, chicken broth, &c.

This treatment was steadily persevered in all the day with partial relief. The face has lost the bluish tinge, and the venous congestion has also subsided.

23rd.—Pulse, 80; temperature, 98.25; was very restless during the night, constantly desiring to be raised forwards into a sitting posture; has expectorated quite a quantity of viscid mucus; lochia present, but paler: milk entirely gone; continue treatment.

Evening.—Symptoms appear much more grave; face congested to a bluish purple color; pulse, 104; orthopnoea, with highly exaggerated respiration; rapid suffocation imminent. Ordered a zinc sulphate emetic, which was followed by immediate relief and marked benefit, as the patient could lie flatter in bed, and the breathing was relieved. Continue treatment.

24th.—Pulse, 82; temperature, 99; passed a restless night, with considerable dyspnoea; diarrhoea also set in about 4 a.m., and the expectoration has nearly ceased; she appears now tranquil. Ordered a few powders of compound powder of chalk while necessary.

Evening.—Diarrhoea much better; no marked difference in the general symptoms.

25th.—Pulse, 88; temperature, 99 2-5; condition about the same as yesterday; diarrhoea better, but the cough more troublesome.

26th.—Temperature, 99; pulse, 94; full, but occasionally irregular; face puffy and red; very great restlessness, and a seeming inability to assume any posture of ease; respiratory movements hurried; heart's action strong, laboring and irregular; intelligence perfect, but aphasic state more decided; no power of answering no or yes, which to this existed throughout; subcrepitant rales are again heard all over the chest. Ordered a mixture of aconite and digitalis occasionally, to supplement present treatment.

Evening.—Pulse, 86; heart's action more regular, but the lungs seem gorged with mucus; face has again assumed the cyanotic color: veins of neck turgid; the zinc emetic again resorted to, with partial relief.

27th.—Pulse, 108—irregular; heart's impulse not so full, but the irregularity exists; the diarrhoea has again returned, and the clear saliva is flowing freely from the mouth: slight difficulty in swallowing. These latter symptoms, I consider, are due to the paralytic affection. She is evidently growing worse, and at mid-day this became most striking. At 5 p.m. she was seen in consultation with me by Professor G. W. Campbell, who was at once struck with the nature of the case. She was then perfectly conscious and her perceptive faculties active; yet all the symptoms had so increased in gravity that we could only regard the case as utterly hopeless. Increase in the strength of the doses of bromide and iodide of potassium was agreed upon, but of which she had only one or two doses, as towards midnight she became very restless; symptoms of suffocation setting rapidly in, and she died a quarter to seven in the morning.

AUTOPSY

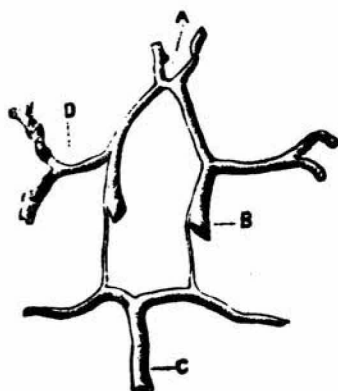
eight and a half hours after death; body much emaciated; rigor mortis marked.

Brain.—On removing the calvarium, which was not more than ordinarily thick, the dura mater was found firmly adherent to it through the enlarged pachionian bodies; veins of dura mater full; general appearance of membrane normal. On exposing the brain there was nothing marked in its condition excepting that it was soft in consistence and pale. The arachnoid was not thickened in any part, and contained little, if any, fluid in its spaces. On making the usual section of the right hemisphere, the puncta vasculosa did not appear more than usually marked or engorged with blood. The right lateral ventricle contained about a drachm of clear serum. Nothing at normal was noticed in connection with its contents, excepting the altered consistence which seemed to pervade the entire brain substance. Careful and minute sections of the corpus striatum and thalamus opticus were made without any positive result.

Left Hemisphere.—Puncta vasculosa normal: brain substance softer, in fact, than opposite side; gives way rather than cuts under the knife. On extending the section to a level with the corpus callosum a localized spot of softening, in area about an inch and a quarter square, was found extending from the lateral and anterior aspect of the corpus striatum forwards and outwards to near the circumference of the brain, involving the fissure of Sylvius and those convolutions known as the Island of Reil. The general aspect of the softened portion was white, but in places—say, in three or four spots, varying in size from a pea to a small marble—there was bloody infiltration and staining of the brain matter of a diffuse pinkish character. The ventricle contained about half a drachm of straw-colored serum, with minute flocculi of lymph floating therein. There were two small deposits of lymph, of the size of a split pea, on the floor of the ventricle; one over the semicircularis; the other in the extreme angle of the anterior cornu. They were firmly adherent in their places.

Base of Brain.—General appearance identical with that of

hemispheres. Arachnoid not thickened or œdematous in any place.



A.—Anterior Communicating. C.—Basilar.
B.—Right Carotid. D.—Left Middle Cerebral with Embolus.

Arteries—Left Middle Cerebral.—At the point of division into its branches, three quarters of an inch from the carotid, the vessel appeared to bulge and felt decidedly resisting to the feel, thought to be atheromatous. Immediately beyond this, and plugging the two main branches, from the very bifurcation, were firm, dark clots, well defined and readily distinguishable from the vessels, both in their front and rear. Each clot was about half or three-quarters of an inch in length, and occupied the entire calibre of the vessels. All the branches beyond the obstruction were empty, collapsed and smaller, apparently, than normal.

There were also noticed two or three small but soft clots in the left anterior communicating, and left posterior communicating arteries. These occupied only about half the calibre of the vessels. Nothing requiring special notice was found elsewhere in the brain.

Heart.—Normal size. Considerable fatty accumulation, especially over left ventricle.

Left Ventricle.—Normal in thickness. Mitral valves healthy.

Right Ventricle.—Tricuspid valve entangled in an immense washed clot or antemortem polypus, which likewise extended up the pulmonary artery for a considerable distance.

Aorta.—Valves normal and patent. Three or four small spots of atheroma, scarcely raised from the surface of the vessel, and none larger than the head of a pin were noticed. Otherwise heart perfectly healthy.

Lungs.—Margin emphysematous. General condition healthy.

After the post-mortem I examined, under the microscope (250 diameters), a portion of the brain taken from the corpus striatum, and from the pinkish, softened substance in the Island of Reil, I found quite a quantity of oil globules and a large number of corpuscles of a somewhat roundish shape, varying in size from half a split pea down to the eighth of an inch; some having a small papilla at one end, others having a granulated appearance. On comparing drawings I made of these with what Gluge calls his "compound inflammation globules" many are identical.

The accompanying wood-cut is an exact representation of the embolus which occupied the left cerebral artery, and does ample justice to the very beautiful and carefully made wet preparation put up for me by Dr. Roddick, House Surgeon, Montreal General Hospital, who also kindly assisted me at the post mortem.

877 ST. CATHERINE STREET, MONTREAL, 13th June, 1872.