NOTES ON A CASE OF OCCLUSION OF THE BASILAR ARTERY.

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Corporal S., R.F.A., was admitted to the Royal Herbert Hospital on the evening of January 1st, 1910, in a helpless condition, with grave cerebral symptoms.

The patient was a well-developed, muscular man, weighing 13 st.; age 27; service thirteen years; single; teetotaler; no history of syphilis or any other serious illness.

History of Present Illness.—He was spending a furlough, prior to leaving for India, with a married sister near Woolwich. Had been in good health, but had complained of constipation for a couple of days before the onset of attack. He retired to bed early on December 31st, owing to a bilious attack, and he vomited once that evening. Early on the morning of January 1st he aroused the household by knocking on his bedroom wall, and he was then found to be in a “fit.” He was seen by Dr. Ferguson, of Eltham, who had him removed to hospital later in the day, and very kindly sent notes of the case.

On admission to hospital he was in a semi-conscious condition, with some delirium and signs of cerebral irritation. (Earlier in the day he had been wildly delirious.)

During the night, January 1st to 2nd, urine and feces were passed involuntarily. On January 2nd he was still semi-conscious, there was marked rigidity of all four limbs, and some signs of bulbar paralysis. He slowly opened his eyes when asked to do so, but apparently he was unable to open his mouth, articulate, or swallow.

Temperature 100° F., pulse 100, respirations 28. Breathing was stertorous owing to the tongue falling back through paralysis of tongue muscles. This was relieved easily by propping the head well forward. There was no distress in breathing, and the lungs and heart appeared to be normal. There was no retraction of the head, and no opisthotonos. The face and neck were congested; pupils equal, neither dilated nor contracted, did not appear to respond to light; no nystagmus. There was a slight difference in the two sides of face—the right side appeared rather fuller and less wrinkled than left, but there was no distinct facial palsy. All four limbs were extended; markedly rigid, with clonic spasms. The patellar and supinator reflexes were much exaggerated on both sides. Ankle-clonus slight on left, indefinite on right side. Both plantar extensor reflexes very marked, extreme on left side, and produced by touching the limb anywhere. The signs generally on the left side were slightly more marked than on the right. Catheter passed—urine alkaline, no albumin.

On January 3rd the patient was completely unconscious, the rigidity had passed off, and there was complete paralysis; pupils equal and contracted, no response to stimuli. Deep reflexes remained the same.
Clinical and other Notes

Temperature rising (103.6° at 10 a.m.). Catheter passed—about one pint of dark urine drawn off—albumin present in moderate amount. Nutrient enemata were given four hourly. It was considered advisable to obtain a sample of cerebro-spinal fluid on account of the early meningeal symptoms. Lumbar puncture was performed by Lieutenant-Colonel Wilson, and after several punctures in the lumbar region without result, about 4 or 5 cc. of fluid were removed from the lower dorsal region. The fluid escaped slowly in drops and showed slight greyish turbidity. After centrifugalization, smears showed a few red cells and a few leucocytes, chiefly unicellular; no micro-organisms.

The patient died early on the morning of January 4th. His temperature, which had been steadily rising since the 2nd, was 110.6° F. before death.

Post-mortem Examination.—Thirty-one hours after death. Deep discoloration in dependent parts. No signs of injury.

Thorax.—Right pleura: recent adhesions in upper half of chest; no fluid. Left pleura: no adhesions, no fluid. Both lungs congested, otherwise apparently normal. Pericardium: healthy; normal amount of fluid. Heart: 12 ounces; fatty deposit at apex; no valvular disease. Aorta: atheromatous patches in first part of aorta, but the aortic valve was free from disease.

Abdomen.—Liver 54 ounces; congested, otherwise apparently normal; gall-bladder distended with bark bile. Spleen: 64 ounces; congested and friable. Kidneys: right 7 ounces, left (with some fat) 12 ounces; both deeply congested (cloudy swelling). Peritoneum: healthy. Stomach: small and large intestine, and other abdominal viscera apparently healthy.

Brain.—Engorgement of meningeal blood-vessels; pia mater firmly adherent to brain along both sides of longitudinal fissure; recent inflammatory lymph over frontal lobes; cerebro-spinal fluid scanty. Base of brain: no meningitis; the basilar artery was completely blocked by a whitish plug at its bifurcation and there was a clot about 1 inch long behind it. The cerebral arteries appeared to be normal. The pons was undergoing softening; no haemorrhages were found beyond punctiform haemorrhage in the grey matter; the white matter in both hemispheres was perhaps somewhat blanched, but no infarcts were seen.

Remarks.—Embolism or thrombosis of the basilar artery appears to be a very rare occurrence, and I should think that the condition is seldom recognised ante mortem.

In this case a tentative diagnosis of haemorrhage into the pons with cerebral meningitis was made.

Professor Osler, in a short account of occlusion of the basilar artery, remarks that the symptoms resemble those of haemorrhage into the pons.

The association of atheroma of aorta is interesting, and no doubt the thrombus came from a patch of atheroma; but this pathological condition produced no symptoms and could not have been diagnosed.