HONAN: CHRONIC HEART DISEASE.

fact that we may have a serious heart condition without any increase in the size of that organ, and with practically no alteration in the action.

Because of the difficulties in diagnosis and of the special clinical opportunities I have had in observing the first symptoms of exhaustion of the work force of the heart I have elected to bring some of the most important symptoms before you for study.

Another very practical reason I have, in making this classification and confining my paper to a study of the work force only, is the great importance of an early diagnosis of the first manifestations of heart weakness. An early diagnosis is of vital importance to the patient, for it means that if proper treatment be instituted the insidious disease process may be checked and the patient enjoy a prolonged and comfortable life.

SOME INTERESTING CASES OF BRAIN SURGERY.*

By JERE LAWRENCE CROOK, A.M., M.D.,
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The subject of brain surgery has always been of special interest to me, due largely to two reasons. In the first place because although injuries of the brain attack the very citadel of life itself, yet the results of operation in this region have not been as brilliant as elsewhere, thereby stimulating one’s best efforts for improvement; and in the next place it has fallen to my lot to have a rather large proportion of these cases come to me for operation, and their variety has covered a wide range. It has been my privilege to present papers on this subject several times, in all of which I have stated with emphasis some few points regarding what I conceive to be the attitude of the conscientious surgeon toward this type of injuries. In the first place, injuries of the scalp and skull should always be approached by the surgeon with every facility for doing radical, thorough, and aseptic work. Again, one should not wait for symptoms of intra-cranial injury to present themselves before resorting to operation. Injuries to the brain call for promptness, as well as preparedness. To wait for symptoms is to let slip the golden opportunity for doing effective work. The diagnosis should be made at the first operation, and as stated before, one should be ready to do anything that may be indicated when he lays open the scalp and exposes the field of injury. Nothing short of absolute knowledge of the conditions present should satisfy the conscientious surgeon. Therefore I hold and have stated on several occasions that when a patient presents himself with an injury to the head the surgeon should operate at once, and determine whether or not there be a brain injury. If there be a wound in the scalp, the head should be thoroughly shaved and the wound enlarged so that there need be no doubt whatever as to whether or not a fracture exists. Should there be no wound, but simply a hematoma to the scalp, and the surgeon is not convinced of the absence of a skull injury, he should incise the hematoma under strict aseptic precaution, and examine the skull with his eye, and fingers in rubber gloves. A strict adherence to this policy will forever preclude the possibility of the surgeon having to treat cases of traumatic epilepsy in after years, due to neglect at the time the injury was first treated.

Without entering further into this important subject, I shall content myself with reporting briefly four interesting cases, three of

*Read before the Section on Surgery of the Southern Medical Association at Hattiesburg, Miss., November 12-14, 1911.
which have recently come under my observation.

**Case 1. Joe Eldridge, Water Valley, Miss.**

This patient was brought to Jackson to Dr. J. T. Herron's Infirmary totally unconscious, with the history of having been comatose nearly six weeks. There was a history of mastoid disease of long standing, and also of having received a blow on the side of the head about ten days before unconsciousness began. The patient arrived during the session of the West Tennessee Medical and Surgical Association, and a number of the members had the opportunity of seeing him. A diagnosis of brain abscess was made and concurred in by all, and at the request of Dr. Herron I operated the next morning. The scalp was laid back over the mastoid region and the point of election chosen for the trephining was a point on a line perpendicular to Reed's base line beginning one and one-fourth inch behind the middle of the external auditory meatus, and one and one-fourth inch above the base line. After the removal of the button, bulging of the dura occurred, showing great tension. The abscess was opened in a backward and downward direction, but was not found until the knife touched a point two and a half inches below the surface, evacuating a large quantity of pus, which gushed out over the instrument table. Tube drainage was inserted and the operation completed. Three days after the operation the patient was able to recognize and speak to his friends. The abscess drained freely for three weeks, the wound slowly healed and the patient left for his home six weeks afterwards, entirely recovered.

**Case 2. E. R. Robinson, Colored. Age 20.**

This boy fell from a trestle on the I. C. Railroad, near Dyersburg about the first of September, 1910, falling about thirty-five feet and striking the back of his head on some hard object. He had practically no attention at the time, and was brought to me by his father, fifty-six hours after the injury, in an unconscious condition. Operation revealed a comminuted fracture in the left occipito-parietal region. During the operation, after elevating the upper and anterior portions of the fracture, the elevators were placed under that portion of the fracture ranging toward the medulla. While I was in the act of elevating that portion of the bone, the ether having been suspended for ten minutes prior to this time, the patient suddenly stopped breathing. For seven minutes, timed by a gentleman present in the room, artificial respiration was practiced, stimulants given hypodermically, and every effort made to resuscitate the patient. At the end of seven minutes, respiration was resumed, the operation was rapidly completed, and the patient put to bed. He made an uneventful recovery. This case was reported in the American Medical Association Journal.
the shock transmitted to the respiratory center in the brain, through the manipulation of the bone elevator was responsible for the respiratory failure.

CASE 3. AMOS NICHOLS, COL. AGE 18. STUDENT.

While walking along from school on October 30, 1911, at 8 p.m., was struck with a brick in the left parietal region, producing a contused wound with laceration of the scalp, the wound not going down to the skull. He was never able to speak after his injury, but immediately walked back to his home, some 300 yards distant. He was attended by a crushed and depressed, a triangular piece one inch by one and one-half inches being found driven into the brain and broken entirely loose from the adjacent structures. This was removed, the wound enlarged sufficiently to thoroughly elevate the depressed portion, and the brain was examined carefully to see that no other loose pieces were driven in. A quantity of clotted blood was removed from between the skull and dura, rubber and gauze drains were inserted, and the operation completed. The patient's condition at the close of operation was bad, shock being profound.

![X-Ray Picture of Charles Harmon, Showing 32-caliber Bullet Imbedded in Posterior Wall of Skull, on a Line with Point of Entrance in Front. The Long Object is a Piece of Wire to Test Penetration of the Ray.](image)

He was treated with normal salt solution by the drop method in the rectum. He rallied after a few hours, and at this date, two weeks after operation, has normal temperature and pulse, with secretions acting normally, and is beginning to talk and use his foot a little. The injury was quite extensive along the fissure of Rolando, the site of the centers of speech, right arm and leg, there being much laceration of brain substance at this point. Every indication points to his complete recovery, with
restoration of the power of speech and the use of his limbs as soon as the brain has time to become fully healed.

CASE 4. CHARLIE HARMON. AGE 17.

Insert small picture here.

While looking in the window of a citizen of Jackson about 10 P.M., on September 15, 1911, the citizen, presuming he intended to break in his home, fired through the wire gauze screen at a distance of about eight feet, with a thirty-two caliber revolver. The bullet entered midway between the eyebrows, immediately over the frontal sinus. The boy turned to run away and was shot a second time, this bullet entering at the angle of the jaw and passing between the muscles of the face and through the inner and lower angle of the eyeball and emerging between the lids. He was brought to my sanatorium at 11 P.M., having been found on the street by the police. He was totally unconscious, with labored respiration, slow pulse, and every symptom of serious brain injury. Operation was done immediately, scalp being laid back over the wound in the head, and the bullet found to penetrate the skull. A trephine opening was made, which was enlarged with Ronguer forceps and the frontal sinus opened. The wound penetrated the posterior wall of the sinus and this was treated likewise with trephine and Ronguer. A button hole slit was found in the dura and this tissue was cut away and the bullet wound in the brain followed with an artery forceps for 2 1-2 inches. A large amount of clotted blood was washed away, two small arteries tied, and a gauze drain inserted about two and one-half inches into the brain, and the operation rapidly completed, as the patient's condition was very bad. The next morning at 9 o'clock, I saw the patient again and found him perfectly conscious, in full possession of his faculties. He talked rationally and intelligently, asked for breakfast and stated the exact amount of money that was in his pants at the time that he was shot, which I found to be absolutely correct, $1.65. He progressed without an untoward symptom to recovery, except that two days after the first operation I was compelled to remove the eye which had begun to slough. Three weeks after the operation, I carried him to Memphis where Dr. Lawrence made the X-ray picture which I here exhibit, which shows the bullet sticking in the posterior wall of the skull on a direct line with its point of entrance. The piece of steel wire shown close by the shadow of the bullet was placed in the patient's hair to show the penetrating power of the X-ray and its ability to project the shadow through both sides of the skull. The patient went to work at his usual occupation in a local pool room five weeks after the injury, and has been working steadily ever since. I exhibit photograph of patient, together with the X-ray picture.

DIFFERENTIAL DIAGNOSIS.


This is another weapon in the armament of the physician whowould be sure of his diagnosis before he chooses his therapeutics. Diagnosis is the key to success in medicine. When a doctor absolutely knows what is the matter with the patient it is easy to decide what to do. All his studies in class room, except materia medica and therapeutics, all his laboratory study is to the sole end of diagnosis. True other things also are based upon these studies, but diagnosis comes first.

In this book Cabot justly features pain, the danger flag of physiology, as the leading element in differential diagnosis. Of the 745 pages, 400 are devoted to consideration of pain in all its aspects, localities and imports.

Then follow the various phenomena of illness, their analyses and significance. The construction of the work is clinical, 385 cases being considered. No treatment is suggested save half a page of dietetics at the close.

A second volume along the same lines is promised. If it should prove as valuable as this one, it will be welcome.