branch of the posterior intracranial circulation was found and trapped, with successful outcome.

Variations from the “normal” arterial tree in this region are described.

REFERENCES


UNUSUAL CASE OF MENINGOCELE IN AN ADULT

JohN W. CHAMBERS, M.D., AND ANTONIO G. REVILLA, M.D.

Department of Surgery (Neurosurgery), Johns Hopkins Hospital, Baltimore, Maryland

(Received for publication November 25, 1947)

Cases of meningocele with increase in the size of the protrusion and progressive neurological changes beginning in adult life must be very uncommon. No similar case appears in the records of the Johns Hopkins Hospital and a review of the literature failed to reveal any case quite similar to this one, which was therefore felt to be worth reporting.

CASE REPORT

History #373455. C.W.S., a white married male, aged 53, was admitted to the Brady Urological Institute Jan. 16, 1946, with the chief complaints of difficulty in urination and progressive weakness of the lower extremities of about 17 years’ duration.

*Family history* did not reveal any congenital abnormalities. His father died of heart trouble and his mother of unknown cause. There were 3 siblings; 2 living and well and 1 dead at 55 years from cerebral hemorrhage.

*Present Illness.* Ever since birth the patient had had a small, nodular protrusion with the shape of a small rudimentary tail in the lumbosacral region, which did not show any increase in size throughout his development until the age of 32, when it began to gradually enlarge. Originally this protrusion caused no symptoms and was not tender but as the patient approached early manhood it became apparent that pressure over this area produced a headache and also pains in the lower extremities. At the age of 32, when there was first noted some increase in the size of the protrusion, there was also increased tenderness in this region, accompanied by very slowly progressive weakness in the lower extremities with pain and para-
esthesias which also involved the lower abdomen. At the same time he became aware of difficulty in starting his urinary stream with slight dribbling at first, progressing to what was apparently incontinence of the overflow type. About 1 year after onset of urinary symptoms he started to catheterize himself and had done so on an average of 3 times daily ever since. The weakness in the legs became so marked as to necessitate the use of a cane for about 10 years. He suffered from chronic epididymitis with acute exacerbation, secondary to the catheterizations which for 3 years prior to admission had been severe enough to require the habitual use of 1/2 gr. morphine for relief. The lump in the lumbosacral region had in the meantime been growing steadily.

*Physical Examination.* TPR were normal on admission, B.P. 188/90. The patient appeared to be a chronically ill, wasted man with a haggard expression, who was very apprehensive. There was marked wasting of the lower extremities (Fig. 1) and the patient found it necessary to curl up on either the right or left side to achieve a comfortable position in bed because of a large mass present in the lumbosacral region. The most striking finding in the examination was this large, dome-shaped swelling over the upper sacral and lower lumbar region with a small teat-like protrusion on the right, which was apparently the original protrusion noted in infancy (Fig. 2). The mass was the size of a large grapefruit and was fluctuant and slightly tender, and continuous pressure over it produced headache. The overlying skin appeared essentially normal and in good condition. The mass could be transilluminated. No solid elements could be felt. Examination of the genitalia revealed a normal well-developed penis but both epididymi were enlarged to about twice normal size and were indurated and very tender. The prostate was slightly larger than normal, showing second degree induration throughout. Remainder of the examination was negative except for the neurologic findings. There was incomplete, flaccid paralysis of both lower extremities, which were held in partial flexion. There was marked wasting of all the muscle groups of the lower extremities, this being more pronounced in the glutei and in the flexors of both thighs and calves. Marked fasciculations were seen in the posterior aspect of both legs above the hamstring tendons. The patient stated that he had better control over the left leg than the right and that there was more power in flexor than in extensor movements. No voluntary movements of the toes were elicited. He could make an occasional, poorly coordinated effort at dorsiflexion of the left foot but was otherwise unable to control or move his ankles. He could flex and extend at both knees, but this was accomplished only by strong effort. The hip joints showed slight limitation of both internal and external rotation. There was complete saddle anaesthesia and analgesia. Pain and tactile sensation were also lost in the glans penis and in the lower extremities from the feet up to a level about 3 inches below the knees. A band of hyperaesthesia was found just below each knee about 3 finger breadths in width. Position sense was absent in the toes but present in the ankles and knees. Vibratory sensibility was absent up to both iliac crests. The ability to discriminate between hot and cold was impaired below the knees and completely absent below the ankles. In the upper extremities there was moderate atrophy of the interos-