Aerocele

The following case is interesting enough to be placed on record.

CASE REPORT

A miner aged 24 was admitted to the Grey River Hospital on April 12, 1949, complaining of recurring headaches. While playing Rugby League football for New Zealand in England on December 20, 1947, he was tackled and thrown violently to the ground, which he struck with the back of his head. It was a severe knock, but he can remember his tackler talking to him and he was not knocked out. He continued playing, but did not play intelligently and made several blunders. He had a headache the rest of the time and can remember very little of the game. After the game he became slightly drunk and vomited. He got up next day and felt fairly well, and played for the rest of the tour. Apart from two or three headaches every week, he felt fairly well.

At the end of the tour he returned to New Zealand and was quite well except for his headaches, which were about the same. These were fairly severe and would last for two to three hours. In March, 1949, he was at the races when a headache came on which was much worse than any he had had before.

He went to bed and when he got up next morning his headache was severe and he vomited. Later he felt all right when lying in bed, but as soon as he got up in the mornings he vomited. Two "blackouts" have occurred, one in 1940 before his accident and one in 1948 after his return from England.

On examination he was seen to be a well-built athletic type of young man of normal intelligence and in no distress. Nothing abnormal was found on full clinical examination. His pupils were equal and reacted to light and accommodation. There was no papilloedema. A radiograph of the skull showed a completely opaque right frontal sinus and a cyst containing air and fluid in the right frontal lobe of the brain. Diagnosis, therefore, could only be a right frontal aerocele.

He was transferred to Dunedin Hospital where a right frontal craniotomy was performed by Mr. Anthony James. The dura was exposed and found to be rather tense. A needle was inserted into the right frontal lobe and a quantity of gas and chocolate-coloured fluid was aspirated from the air-containing cyst. The dura relaxed and the brain was then retracted. This exposed a prolongation of brain tissue which was adherent to the dura at the posterior wall of the frontal sinus, and a sharp spicule of bone pierced the dura at the point of attachment. The prolongation was sealed with the diathermy and divided, and beside the spicule of bone piercing the dura there was a small dural defect presumably entering the frontal sinus. The spicule of bone was chiselled off, and a patch of temporal fascia was removed and sutured through the dura over the posterior part of the frontal sinus.

The patient made a good recovery and has had no further recurrence.

COMMENT

One can only conclude that this patient sustained a fracture through the right frontal sinus in December, 1947. This was probably the cause of the spicule of bone piercing the dura and extending into the frontal lobe. Some haemorrhage would occur into the frontal sinus. The patient would thus have a communication from the nose into the

frontal sinus and thence through the dural defect into the frontal lobe of the brain, and every time he blew his nose he would blow air into his frontal lobe, forming the cyst, which lay at a depth of 1 cm. from the surface. In the course of time the cyst had enlarged with the addition of air so that some of the symptoms of increased intracranial tension were present. It is remarkable that the patient did not develop a meningitis from infection through the nose.

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Large Post-Rectal Dermoid

Post-rectal dermoids, derived from the post-anal gut, are rare, and the following case seems worthy of record.

CASE REPORT

A woman aged 26 attended the out-patient department on October 27, 1947, complaining of sterility. She had been married eighteen months and had been told (incorrectly) that a lump at the bottom of her spine was a spina bifida, and at once she declared that in no circumstances would she have it operated on. Her periods were regular, lasting four to five days. Her general health was excellent.

On examination her abdomen felt full and there was a sense of resistance in the suprapubic region. A cystic swelling (sacro-coccygeal), overlapping and below the tip of the coccyx, was present. The vagina was found to be compressed and to run forward close behind the symphysis pubis and the cervix could only just be touched with the finger. The anterior curve of the vagina was due to the presence of a cystic swelling occupying the hollow of the sacrum and nearly filling the pelvic cavity. The rectum ran anterior to the swelling in a curve closely approximated to the vagina and through its posterior wall bony hard nodules about the size of hazel nuts were palpable.

A diagnosis of post-rectal dermoid with sacro-coccygeal tumour was made. This was confirmed by radiographs which showed the presence of teeth and bone in the cyst, the outline of which practically filled the pelvis.

Operation.—On November 10, with the patient in the Trendelenburg position, a midline incision was made. Immediately under the abdominal wall in the lower half of the incision the bladder and uterus presented, and immediately behind the uterus above the level of the pelvic inlet was the recto-sigmoidal junction. The top of the cyst occupied the remainder and greater part of the pelvic inlet. The peritoneum over the cyst, to the right of the rectum, was incised. A plane of separation was found only with difficulty: there was no question of the cyst "shelling out." It was separated, after evacuation of much pulsatous matter, from the rectum in front and from the sacrum behind to the level of the coccyx, and at this level with long curved flat scissors it was separated from the remaining solid column of tissue continuous with the external coccygeal tumour. The pelvic peritoneum was closed over the cavity. Haemorrhage from pelvic veins was brisk and a transfusion was necessary. The patient made an otherwise uneventful recovery, being discharged on December 6.

Six weeks later, on examination with a finger in the rectum and the thumb on the sacro-coccygeal tumour, there seemed to be a mass of tissue about 1½ in. (3.7 cm.) thick in the coccygeal region. Above this the rectum was in relation to the sacrum.

The specimen consisted of a large multilocular cyst, 8 in. (20 cm.) long and the diameter of the pelvis, and contained bone, teeth, hair, and much sebaceous matter.

I am indebted to Dr. Ainsley, of West Hartlepool, for a note on her subsequent confinement. She was successfully delivered of a full-term infant on March 16, 1949. Forceps were necessary, and apart from a tear which needed stitching the confinement went normally.

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