C A S E
OF
POPLITEAL ANEURISM,

SUCCESSFULLY TREATED BY FLEXION OF THE KNEE.

BY
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ASSISTANT-SURGEON TO AND LECTURER ON ANATOMY AT GUY'S HOSPITAL.

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E. P—, a pale, unhealthy looking man, æt. 31, was admitted into Guy's Hospital, under my care, on the 5th August, 1863. He stated that he was by occupation a waiter, that his habits were temperate, but his general health was not good; he was often excitable, often languid, never very strong. Ten or twelve weeks before admission he experienced about the right knee, especially about the knee-cap, some slight pain, which after lasting for a few days subsided. In the course of two or three weeks, however, the pain returned with increased severity, and he discovered in the popliteal space a small pulsating swelling, which gradually increased in size until the period when he sought admission to the hospital. He suffered very severe pain whenever he attempted to bend the knee, and when walking, often became sick and faint. He could not recollect to have strained the limb, nor to have met with any accident to which he could attribute the origin of his malady.

On examination the day after admission, an aneurism,

about the size of an orange, was found situated rather in the upper part of the right popliteal space. It pulsated very distinctly, was comparatively firm to the touch, and could not easily be emptied to any extent by manipulation. The characteristic bruit could be clearly heard by means of the stethoscope. Pulsation in the aneurism was very readily stopped by pressure upon the femoral artery in the upper part of the thigh. Pulsation of the tibial arteries was distinct enough during extension, but could scarcely be felt when the limb was flexed. The patient was in a weak, irritable condition; his pulse was 96; he had evidently suffered much from pain and sleeplessness.

The case appearing in many respects suitable for the treatment by flexion, I resolved to try that method. Accordingly, the knee was bent as far as was deemed expedient, and the foot placed in a kind of slipper, which was attached by a heel-strap to broad bands passed round the thigh and pelvis. The limb was thus kept in position in a manner similar to that described by Mr. Spence in the 'Edinburgh Medical Journal' for November, 1858. At the same time a draught, composed of ten minims of tincture of opium, ten minims of tincture of digitalis, two minims of dilute hydrocyanic acid and camphor mixture, was ordered to be taken every three hours.

During the night the patient suffered so much pain and inconvenience that he was obliged to loosen the strap to the fullest possible extent, and in the morning his foot and leg were found to be somewhat œdematous. His pulse, however, was reduced from 96 to 75, and he felt generally more comfortable. Under these circumstances the slipper apparatus was discarded, and the plan recommended by Mr. Hart adopted. The limb was bandaged from the toes to within a short distance of the knee, and carefully flexed. A large pad of cotton wool was placed over the aneurism, and in the flexure of the joint, and the roller was then carried round the thigh. The thigh was, of course, flexed on the pelvis, and the whole limb supported by pillows. On each succeeding day for the next three days the flexion was

slightly increased, a fresh roller being placed over those already applied, which were not interfered with. On the 11th (*i.e.* the *fourth day from the fair commencement of the treatment*), all the bandages were removed, and the aneurism was carefully examined. No pulsation could be felt; but on making deep pressure into the space, a slight thrill was just perceptible. The limb was again flexed, and the bandages reapplied. The next day neither pulsation, thrill, nor bruit could be detected. During the *first two days* of the treatment the patient suffered *severe pain*; but during the last three he was comparatively easy. He was kept in bed for a few days, and directed gradually to extend the limb. In the course of a week or two he was able to get about comfortably. He suffered little or no pain, and the cured aneurism gradually diminished in size. He left the hospital quite well on the 28th August. Pulsation was distinct in the tibial arteries.

Postscript, July 26th, 1864.—The patient is again under my care in Guy's Hospital on account of a fistula in ano. No trace of the aneurismal sac can be felt, nor can any pulsation of the tibial arteries be discovered at the present time, though distinct enough when he left the hospital last August.