rapidly and without undue exposure or chilling of the surface, rigors and fever will rarely follow. In very nervous, excitable patients, or where there is likely to be pain, ether may be advisable.

8th. During the more severe methods of intra-uterine treatment, such as curetting or brushing (Ecouvillonage of Doléris), the placental site is apt to be disturbed; some of the little plugs may be scraped or brushed away from the mouths of vessels, permitting the entrance of air, fluid or septic matter. Curetting or brushing should be followed at once by a small douche of very hot water, given very slowly and carefully: a bæillus of iodoform should then be passed into the uterine cavity, and the vagina loosely packed with a strip of iodoform gauze.

ACUTE PERIOSTITIS OF FEMUR IN AN INFANT.

BY MR. EDMUND OWEN, F.R.C.S.

[From notes of a case under his care in the Hospital for Sick Children, Great Ormond Street, London, Eng., by Dr. Penrose, Registrar.]

THE following case of acute periostitis of femur and separation of lower epiphysis with subsequent pyæmia and death occurred in an infant of three and a half weeks, admitted 12th November, 1887, on account of a tender swelling above the right knee, the skin over that region being red and glazed.

History.—The infant was born at full time, and in a perfectly natural way, in a neighbouring workhouse, and was vaccinated on the fourth day. The vaccinia ran its course quietly, and at the time of admission the three sores had coalesced into a slight superficial ulceration. The mother attributed the swelling of the thigh to the nurse having lifted the infant by the legs when it was four days old; the limb began to grow tender about six days after that occurrence. There was a fluctuating swelling at the back of the left wrist.

Under chloroform, Dr. Lewis, the House Surgeon, detected fluctuation in the depths of the brawny swelling of the thigh; and he also made out clearly that the lower femoral epiphysis was detached. With a tenotomy-knife he then freely evacuated an abscess from beneath the periosteum, and, passing his finger into the cavity, felt the upper and posterior edge of the epiphysis tilted back into the popliteal space—possibly by the traction of the gastrocnemius. He could not rectify the position of the epiphysis; so, having washed and drained the cavity, he had to put up the limb in a bent position in a Bavarian splint. Two days later a soft swelling was noticed over the inner end of the right collar-bone; the skin over the wrist-swelling was reddening. During the next two days the infant had several convulsions—the rigors of childhood—and he died jaundiced, and with a temperature of 102° F., on the fourth day after his admission, the knee looking at the time of death in a satisfactory condition.

Remarks.—Separation of the lower epiphysis of femur is not a common lesion. Injury, even, to that region of the limb is more likely to expend itself in fracturing the femur, or setting up inflammation of the knee-joint than in detaching the epiphysis. Injury, however, is the most common cause of separation; sometimes it happens at birth, by an officious midwife or an over-zealous obstetrician dragging too eagerly at the knee.

Congenital syphilis may be associated with dissolution of the connecting medium; but in this case the infant was too young for such a manifestation—and a very rare one it is—of the disease. Moreover, there was neither evidence or history of congenital taint.

Periostitis and superiosteal abscess sometimes causes the epiphysis to be cast adrift, and probably this was the explanation in this case.

Pyæmia may determine, though it is far more likely to succeed the detachment. That this child was pyæmic is evident:—He had secondary abscesses at wrist and over clavicle; he was convulsed, and he had jaundice. The question arose, did the early vaccination possibly start a pyæmia which ended in the femoral lesion? This is not likely, as there was no axillary bubo, whilst the chief and earliest trouble seemed to be in the thigh.

Post-mortem examination showed the femur to be bared of periosteum in its lower half, and bathed in a considerable quantity of pus. The knee-joint was not implicated. On opening the abscess on the left wrist the lowest inch of the back of the radius was found to be denuded. The tumour over the collar-bone was an abscess containing unhealthy pus which had laid bare the epiphyseal cartilage at the sternal end of the clavicle. There was some suppuration at