ART. IV.—On Secondary Hæmorrhage, owing to Ulceration of the Popliteal Artery by a Sequestrum. * By EDWARD W. COLLINS, M.D., Univ. Dub.; Surgeon to Jervis-street Hospital, &c.

Among the complications which may arise during the progress of acute or chronic osteal inflammation, involving the lower extremity of the femur, few can occasion more anxious consideration than ulceration of the main artery of the limb. The following case illustrates this subject:—

A delicate boy, eight years of age, while playing on Saturday, July 17, 1875, received an injury over the lower part of the thigh. Edematous swelling, pain increased on movement, tenderness to the touch, and febrile symptoms having manifested themselves, he was brought to Jervis-street Hospital, and placed under my care, on the following Wednesday. Bromide and iodide of potassium were administered internally, and hot linseed-meal poultices applied to the limb. During the next few days the fever continued stationary (pulse 120; temp. 101° F.); but the local signs gradually augmented in gravity.

By Sunday morning, nine days after the injury, the edematous swelling had extended from the lower end to midway up the inner side of the thigh. At its lower part the swelling was greatest; and under the edema, in this situation, a deep-seated tense fulness

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was indistinctly perceptible to the touch. There was no discoloration of the skin; but, during the past two days, the superficial veins on the front, and on this morning those on the outer side, had become more manifest than natural, and turgescent, for some distance up the thigh. The tenderness on pressure, which at first had been confined to the inside and back of the lower extremity of the bone, had now extended to the front. Any attempt at movement caused great suffering. Though the boy did not complain of pain, inquiry from those in the ward proved that he must have suffered considerably, from his cries during the night. He had shiverings at times. Judging from the constitutional disturbance, indicated by the febrile phenomena and rigors, as also from the local signs—pain, exquisite tenderness on pressure and movement, tense deep-seated swelling with superficial œdema, and venous turgescence—that matter had formed under the periosteum, I no longer delayed the deep incision I had contemplated. Chloroform having been administered, I divided the œdematous tissues down to the bone over its inner and lower part. With a director I freed the fascia. Passing my finger into the opening, I felt the bone exposed, and turned the point of the knife, guided and protected by my finger, round its edge, into the popliteal space, striking matter. Blood, meanwhile, had flowed freely from the incision. I, therefore, plugged it with lint, securing over all a pad by means of a bandage carried from the toes to the middle of the thigh. Four hours later, on removal of the bandage and plug, matter issued in large quantity from the opening, its flow being accelerated by pressure in front and in the popliteal space. The boy expressed himself as free from pain (pulse 120; temp. 103° F.). I ordered him quinine, and an increased quantity of stimulants.

Matter continued to come away freely during the succeeding days, especially when pressure was made above and behind the opening. The shiverings ceased; the tenderness diminished; his appetite improved; and he looked well, though thin. The pulse and temperature, however, continued at the same rate as before the incision. Finding that arrangement of his position in bed did not give sufficient exit to the matter, on the fourth day (July 29), I effected a counter-opening in the popliteal space, on the outer side of the inner ham-string tendons, by means of the trocar recommended by Mr. Cock for rectal paracentesis vesica. Through the canula I introduced a silver wire drainage tube. Considerable amendment for some days followed this treatment. His temperature