suggestion of the doctor who was called to the accident, the wooden shaft had been sawn through just above the metal, for ease of transportation.

The upper tine had missed him but the three others had passed right across the buttocks and groins. The second in series entered the left buttock as shown, passed lateral to the femur, and lay with the point just under the skin of the front of the thigh. The third in series entered the posterior surface of the left buttock, passing medial to the femur, and emerged between femoral artery and vein, with the point pushing forward the overlying skin about 2 in. (5 cm.) without piercing it. The lowest tine passed deeply across the right thigh, medial to the femur, emerged momentarily in the right groin, entered the scrotum after $\frac{1}{2}$ in. (0.6 cm.), and appeared just below the pubic ramus, protruding through the skin at the base of the penis and apparently transfixing the urethra. There was no clinical evidence of sciatic-nerve involvement and the patient's general condition was good.

The four entry holes and the two exit holes were "ringed" with gentian violet for ease of identification. Catheterization revealed no blood and the urethra was assumed to be undamaged. Under general anaesthesia (Dr. Swallow) at 7 p.m. (that is, two hours after the accident) the fork was extracted—a strong pull being required. All the puncture wounds were excised within ellipses of skin as far as the deep fascia, and the tracks were enlarged slightly and generously powdered with sulphathiazole and penicillin powder; $\frac{1}{4}$ -in. diameter drainage tubes with holes cut at $\frac{1}{2}$ -in. (1.25-cm.) intervals all along were then put into most of the length of each track. The patient received 6,000 I.U. of tetanus antitoxin and 2 ml. of polyvalent gas-gangrene antitoxin pre-operatively. The tetanus antitoxin was repeated on the third day and the A.G.G.S. on the third and sixth days. He received 1 ml. of tetanus toxoid on the seventh day. Procaine penicillin, 600,000 I.U., was administered twice daily for seven days. The bacteriological report on the manure removed from the implement was as follows: "Culture—a proteolytic anaerobe morphologically typical of *Clostridium tetani* was cultured."

Convalescence was uninterrupted. The tubes were removed on the fourth post-operative day, and secondary closure of the wounds was made on the 15th day. The patient was discharged from hospital with all wounds healed on the 36th day.

Not a single drop of blood escaped until the fork was withdrawn, when the entry holes bled briskly. If a tine had entered the femoral artery or other large vessel, premature withdrawal would have complicated the issue by probably producing internal haemorrhage. Had some well-intentioned person removed the fork before admission to hospital the difficulties of visualizing each track and its relation to important structures would have been greatly increased.

My thanks are due to Mr. N. J. Nicholson, consulting surgeon to this hospital, for permission to publish this case and for advice; to Dr. W. J. Mozdierz for his assistance; and to Nurse Pope for the drawing.

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Chronic Myeloid Leukaemia and Pregnancy

The association between chronic myeloid leukaemia and pregnancy is rare. McGoldrick and Lapp (1943), in an exhaustive review of world literature (94 references), could find only 41 substantiated cases for statistical use. They quote a maternal mortality of 36.5% and a foetal mortality of 16.4%. Li, McBride, and Mettier (1947) recorded four cases and Williams (1948) a further seven cases, with a maternal mortality of *nil*, bringing the total up to date, of this variety of leukaemia, to 52.

CASE REPORT

A woman aged 25 was first seen at hospital on June 23, 1947, complaining of swellings of the legs. On examination these swellings were seen to be subcutaneous haemorrhages and the spleen was found to be enlarged, extending for 10 in. (25 cm.) below the xiphisternum. The blood count was: haemoglobin, 67%; red cells, 3,200,000; colour index, 1.04; platelets, 84,000; white cells, 188,800. The diagnosis of chronic myeloid leukaemia was established. She was admitted to hospital and treatment with urethane was begun. During the remainder of 1947 and 1948 she continued to work, and the white cell count was kept under control with urethane.

On November 9, 1948, her blood count showed the haemoglobin to be 72% and the red cells 2,950,000, but the white cells had risen to 202,000. She was referred to the radiotherapy department for x-ray treatment of the spleen, which reached to the iliac crest and almost to the midline. From December 15 to January 19, 1949, a total of 900 r to the skin over the spleen was given, reducing the white count to 6,800. The blood count on April 25, 1949, was: haemoglobin, 62%; white cells, 8,200.

On July 8 she was referred for a gynaecological opinion as she had noticed a swelling of the lower abdomen; she was otherwise symptom-free and was at work in a factory. On examination the uterus was found to be the size of a 28-weeks pregnancy and the foetal heart could be heard; the spleen was palpable, extending for 4 in. (10 cm.) below the costal margin. The patient, still unmarried, did not know she was pregnant and could only give the date of her last menstrual period as some time in January. The blood count on July 11 was: haemoglobin, 60%; red cells, 3,620,000; white cells, 33,200. No myeloblasts were seen.

On September 19, with a normal delivery, she gave birth to a living female infant weighing 6 lb. 12 oz. (3.1 kg.). The placenta was expelled with a total blood loss of only 8 oz. (230 ml.). The placenta contained numerous infarcts. The infant, which appeared to be a full-term child, had a spina bifida and myelocoele extending for 3 in. (7.5 cm.) over the lumbar region associated with a spastic paraplegia. The infant's blood count was: haemoglobin, 128%; red cells, 6,350,000; white cells, 10,400 (polymorphs 60%, lymphocytes 30%, monocytes 10%). The baby died on September 26.

Post-mortem Report (Dr. A. J. McCall).—The body was that of a female infant apparently full-term with a swelling over the sacrum about 2 by 3 in. (5 by 7.5 cm.) in diameter. The skull was normal except for an unusually large gap between the two frontal bones. There was intense engorgement of the leptomeninges, and the cerebrospinal fluid in the ventricles was obviously purulent. Examination of the pus revealed numerous *Bacterium coli*. The lungs were congested and oedematous. There was a defect in the lower lumbar and sacral vertebrae due to spina bifida. The skin over the swelling had not ulcerated but the cavity contained pus. Histological sections from the lung, kidney, suprarenals, liver, spleen, and one rib showed no evidence of leukaemia. Death was due to *Bact. coli* meningitis from infection of a spina bifida.

The puerperium was uneventful and involution satisfactory. The mother's blood count on September 21 was: haemoglobin, 54%; red cells, 3,840,000; white cells, 74,000. On September 27 it was: haemoglobin, 62%; red cells, 3,410,000; white cells, 110,000. Moderate hypochromasia, anocytosis, and poikilocytosis were present. There were over 600 normoblasts for every million red cells, and rare myeloblasts were found. She remained symptom-free and returned to work.

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