thickened. The *right kidney* weighed 127 grams ($4\frac{1}{2}$ ounces), and microscopically the larger arteries (interlobular, etc.) showed considerable thickening of both middle and inner coats, whilst the glomeruli showed hyaline swelling of their capillaries. There were decided degenerative and necrotic changes in the epithelium of the convoluted tubules, which were, however, doubtless "terminal" in nature, or rather, of *paulo-ante-mortem* and partly *post-mortem* origin.

There were *old fibrous adhesions of the great omentum*, and chronic adhesions of the left broad ligament and Fallopian tube to the omentum and left wall of the pelvis. The sigmoid flexure and the rectum were much elongated and convoluted. There was excessive sacculation in the pelvic colon. The caecum was filled with pultaceous faeces, and the transverse colon, sigmoid flexure, and upper part of the rectum contained marble-like scybalous faecal masses, and the mucous membrane showed catarrhal changes.

The *uterus* was small and atrophied, and on its anterior surface an old, partially calcified, small fibromyoma projected. The *ovaries* showed marked fibrotic atrophy.

Bone Marrow.—The bone marrow of the shaft of one femur which was examined was red, as also was that of the cancellous bone and of the ribs. Microscopic examination of the bone marrow showed great excess and activity of erythroblastic tissue, and also, to a lesser extent, excess of leucoblastic tissue. There were small areas of diffuse haemorrhage. A striking feature of all the bone marrow preparations was the unusually large number of giant cells of the megakaryocyte class (see Fig. 1). An equally striking feature was the relative absence of evidence of phagocytosis and processes of blood destruction by the endothelial cells.

There was nothing of importance to note in regard to the pancreas, thymus, thyroid, pituitary gland, and pineal body. The calvarium was of medium thickness, but very compact and relatively heavy. There were arterio-sclerotic changes in the cerebral arteries, and terminal local thrombosis in some of the vessels, with consequent softening of the right supramarginal and angular gyri. There were, as above mentioned, arterio-sclerotic changes in many of the medium-sized visceral arteries, especially coronary, renal, and cerebral, and the gangrene of the left small toe was probably of arterio-sclerotic origin.

REMARKS.

The high blood pressure during life in this case of erythraemia was explained by the renal and vascular changes demonstrated at the *post-mortem* examination. It is clear that the blood destruction in the spleen and bone marrow, as evidenced by the phagocytosis of erythrocytes, etc., was not relatively excessive. But even if blood destruction in most cases of erythraemia were relatively deficient, the abundant and invariable evidence of greatly excessive erythrocyte formation shows that deficient erythrocyte destruction (as has been long recognized) is not the main cause of the polycythaemia rubra. Nevertheless, as Dr. Carnegie Dickson points out to us, the relatively deficient blood destruction in the present case might well be contrasted with the evidence of excessive destruction of erythrocytes in the bone marrow and spleen (reticulo-

endothelial system) of, let us say, typical cases of pernicious (Addisonian) anaemia. In regard to the great excess of megakaryocytes in the bone marrow, it is rather unfortunate that no exact count of the thrombocytes (blood platelets) in the circulating blood of the present case was made. In ordinarily stained blood films the thrombocytes did not appear to be in excess.

We are indebted for the illustrations to the kindness of Dr. Carnegie Dickson. Fig. 1 is to illustrate the microscopic appearance of the bone marrow from the centre of the shaft of the right femur, where in ordinary persons there is only fatty marrow. It shows excessive erythroblastic activity, the cells being mostly erythroblasts. To a lesser extent there is evidence of leucoblastic activity, but this was more obvious in the rib marrow. An especial feature is the large number of megakaryocytes, which were scattered throughout the sections of the marrow in both femur and rib. Fig. 2 is from the spleen; it shows fibrosis of the reticulum, with more or less disappearance of the lymphocytes of the Malpighian corpuscles and pulp.

FIG. 2.—From the spleen; showing fibrosis of the reticulum, with more or less disappearance of the lymphocytes of the Malpighian corpuscles and pulp. ($\times 400$.)

puscles and pulp. The engorgement with blood was better shown in other sections. In both the bone marrow and the spleen there is no evidence of any excessive destruction of erythrocytes.

PARAPHIMOSIS OF THE CLITORIS.

BY

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On September 18th, 1928, I was asked by Dr. Hepplewhite of Wallsend-on-Tyne to see in consultation with him a female child, aged 9 years and 4 months, who had a painful swelling at the vulva. Five days previously when out for a walk with an aunt it was noticed that the child was limping, but she denied that anything was the matter. On the day before I saw her she complained for the first time of pain, and only then was she examined, and a painful swelling in the region of the clitoris was noticed, but nothing was done until the next day, when Dr. Hepplewhite was called in.

I was informed that the child was a devotee of a "fairy cycle," and the parents thought that the child had probably injured herself by the saddle when riding this. Dr. Hepplewhite made a diagnosis of paraphimosis of the clitoris, a diagnosis which proved to be correct.

On examination there was nothing unusual to note about the child's development; there were no signs of puberty. The normal site of the clitoris was replaced by an oedematous swelling the size of a large walnut. The swelling was the exact size and shape of the glans penis in an adult male in a case of hypospadias; it was rounded and smooth, with a vertical groove on its ventral surface. Immediately behind the swelling was a constriction with a circular area of ulceration similar to that seen in

FIG. 1.

a neglected paraphimosis in the male; the area was so exquisitely tender that a complete examination was not tolerable.

The diagnosis of paraphimosis of the clitoris was confirmed by an examination under a general anaesthetic. An attempt to divide the constricting band and reduce the paraphimosis was unsuccessful, and as there was a tendency to haemorrhage the clitoris was ligatured off. A full examination of the genitals failed to disclose any abnormality.

A photograph of the child was taken, and Mr. S. A. Sewell has made a drawing from it (see Fig. 1). He has also drawn the specimen, which is the actual size when removed (see Fig. 2). It has been preserved by injecting gelatin into it.

FIG. 2.

It is impossible to say how the hood of the clitoris came to be displaced backwards. The mother said that she had never noticed any obvious deformity about the child's external genitals, so probably the prepuce was not of abnormal size. There is no reason to think that it was due to masturbation; therefore, accepting this premise, I regard the "fairy cycle" saddle as the probable cause which displaced the prepuce backwards and gave rise to the condition.

The child was seen on November 1st, when she was fit and well. The wound was healed and the scar most satisfactory.

Having no knowledge of a similar case I applied to the librarian of the Royal Society of Medicine, who gave me permission to state that, despite a prolonged search, he is unable to find any reference to the condition in the literature. He showed me that there were numerous references to phimosis of the clitoris due to adhesions of the prepuce.

A CASE OF POST-PARTUM ANAEMIA.

BY

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The following case shows how important the correct treatment is in this somewhat rare condition.

A woman, aged 35—who had had no former illnesses except appendicitis, cured by operation, at the age of 21—was delivered of her first child in 1918. Labour lasted for three days, and was followed by severe post-partum haemorrhage. The baby lived a few hours. The patient ran a temperature for several weeks after the confinement, was anaemic, and suffered from severe headaches and occasional rigors. *B. coli* were present in the urine. There was right iliac pain for three months afterwards, which was diagnosed as ovaritis. Her second confinement took place in 1920, and was uneventful, and the puerperium normal.

A few days before her last confinement, on November 3rd, 1926, she had a mild attack of influenza. A few *B. coli* were found in the urine during the last weeks of pregnancy, for which urotropine was administered. The delivery was a breech; the baby was born without difficulty, and there was no trouble with the placenta, which was normal in appearance. There was no post-partum haemorrhage.

On the following day the patient complained of severe frontal headache and looked alarmingly anaemic, as though she had had a severe haemorrhage during the night. Inquiries showed that there had not been any haemorrhage, and examination revealed nothing abnormal. The headache continued, and was accompanied by impairment of memory, general weakness, and progressive anaemia. The temperature began to rise in the evening up to 101° F., and the patient appeared to be very ill. There was no evidence of puerperal sepsis. The liver and spleen appeared normal; there was no history of sore mouth. The tongue, teeth, and gums were healthy. Subsequent x-ray examination showed no sign of apical sepsis. The heart and lungs were healthy except for a haemic murmur, which has since disappeared. Blood culture was negative. Report by one of us on blood examination on November 18th was as follows:

Haemoglobin	...	...	...	34 per cent.
Red blood cells	...	...	...	1,603,000 per c.mm.
Colour index	...	...	...	1.1
Leucocytes	...	...	...	6,500 per c.mm.
Differential count:				
Polymorphonuclears	...	...	...	70.3 per cent.
Lymphocytes	...	...	...	20.3 "
Large mononuclears	...	...	...	4.7 "
Eosinophils	...	...	...	4.0 "
Mast cells	...	...	...	0.7 "
				100.0

"Eight megaloblasts, six normoblasts, and one microblast were noted in counting 300 leucocytes. Poikilocytosis and anisocytosis were well marked, and there were many macrocytes and microcytes. Basophilia and basophilic stippling of red cells were very prevalent. Many of the polymorphonuclears showed immaturity and degenerative changes.

"The blood picture is that of pernicious type; such cases arising in the puerperium appear to be particularly amenable to treatment, especially by transfusion, and a high proportion of recoveries has been reported."

At this stage she was seen by Dr. J. R. Collins, who could find no evidence of puerperal sepsis or other focus of infection.

Another blood culture was negative. She was put on iron and arsenic and hypodermic injections of adrenaline, and dilute hydrochloric acid 1 drachm three times a day. In spite of treatment she continued to go downhill, and on November 26th the report on her blood was:

Haemoglobin	...	...	...	25 per cent.
Red blood cells	...	...	...	1,270,000 per c.mm.
Colour index	...	...	...	1.0
Differential leucocyte count:				
Polymorphonuclears	...	...	...	60 per cent.
Lymphocytes	...	...	...	30 "
Large mononuclears	...	...	...	4 "
Eosinophils	...	...	...	5 "
Mast cells	...	...	...	1 "
				100

Owing to the paucity of cells in the extremely thin films which the watery blood afforded, only 100 leucocytes were counted. There were three megaloblasts, five normoblasts, and one microblast to 100 leucocytes.

The blood picture is that of the most grave degree of pernicious anaemia: poikilocytosis, anisocytosis, basophilia, and basophilic stippling are seen in every field. The most favourable reading possible of the haemoglobin content has been given; there is always some personal element to be allowed for in this estimation. The patient has lost 9 per cent. of haemoglobin and 330,000 red blood cells per cubic millimetre since the last examination eight days previously. This needs no further comment. The vomit is devoid of free hydrochloric acid.