HÆMORRHAGIC NEPHRITIS OR BLOOD TUMOUR OF KIDNEY (HÆMONEPHROSIS).

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THE following case presented very unusual symptoms during life, and after death such uncommon pathological conditions were found that a record of it may prove of interest. For permission to publish the case I am indebted to Mr. T. A. Dodd, surgeon to the Newcastle Workhouse Hospital, and for most of the notes to Dr. Marcus Bowlan, then resident medical officer, with whom I saw the patient during life.

E. McC., aged 23 years, single, a domestic servant, was admitted into the Newcastle Union Hospital on July 10th, 1889, complaining of pain in both sides of the chest of one month's duration, and of a swelling in the upper part of the right chest, which she had noticed only two or three days previously. Beyond the fact that her mother died of apoplexy

at the age of 38, the family history contains nothing of importance. The only illness patient ever remembered having was small-pox when she was a child. There was no history of scarlet fever, nor any which points to a previous attack of nephritis. Four weeks before admission, whilst walking leisurely in the town, she was suddenly seized with severe pain between the shoulders. She did not fall nor did she faint, but as she was passing one of the parks in the town she entered it and sat upon a seat for a time. Shortly afterwards, feeling rather better, she made her way home. She applied mustard poultices, but this simply

caused the pain to move to both sides of the chest, where, for a time, it remained. It was for these pains, and the fact of her being homeless, that she was admitted into the workhouse hospital. Two or three days before entering it she noticed a painless lump in front of her right chest, 2 inches below the clavicle.

Her state on admission is described as follows: "She is pale and has a careworn expression; there is no apparent loss of flesh; temperature on the evening of admission, 101°; tongue clean. She complains of distressing palpitation. On examination there is noticed immediately to the right of the sternum, between the first and second costal cartilages, a rounded tumour: it is the size of half a billiard ball. With each beat of the heart this tumour pulsates; the impulse is synchronous with that of the carotid artery; the tumour is slightly expansile, and is dull on percussion. No *bruit* is detected over it, but the sounds of the heart are unusually loud; the second aortic sound being highly

accentuated. Pulse 100, regular, hard, incompressible; veins of neck are distended. The respiratory system is normal, but the rate of breathing is accelerated." The urine was not examined on the day of admission, but a few days afterwards it had a specific gravity of 1012, and contained one-eighth of albumen and many granular tube casts. There was no oedema or dropsy anywhere; the menses were normal. The right pupil was dilated compared to the left; retina and discs were healthy.

At first, as the swelling in the front of the chest was thought to be aneurysmal, iodide of potassium was administered, and either as the result or not of this treatment, the tumour within three weeks ceased to be pulsatile and painless; it became hard and painful, and later on a distinct red blush appeared upon its surface. By degrees the tumour got less, the pain diminished, the red blush disappeared, and fluctuation was detected in it. Epistaxis now supervened, and was repeated from time to time. When I saw her on August 24th, loud pericardial friction could be heard. There was great complaint of precordial pain, which was scarcely at all relieved by the external application of

belladonna and glycerine. The symptoms of pericarditis increased, dyspnoea amounting to orthopnoea occurring. Fly blistering gave great relief. Within three days friction had disappeared, and beyond the fact that the first cardiac sound was indistinct and reduplicated, nothing else was detected. Meanwhile the localised bulging on the front of the chest had been getting less. A hypodermic needle inserted into it drew off a dark coloured fluid—pus and blood.

From this date she began to improve, although the amount of albumen in the urine remained the same. About a fortnight afterwards she experienced a severe

Blood tumour of kidney (two thirds of original size). *a*, Space occupied by blood. *b*, Dense firm band is all that remains of kidney substance. On microscopical examination the part nearest to blood cavity is found to consist of fibrous tissue, imbedded in which are the shrunken remnants of tubules; these have atrophied from pressure, the few cells left are fatty; the outer part of band presents the appearances met with in tubular nephritis.

pain in the right side of the abdomen. Over the seat of the right kidney it was noticed that a large swelling had suddenly formed. Constant vomiting was now a prominent symptom. Hæmaturia appeared, and lasted for one week. At this time the swelling in the abdomen was large and fluctuant. An aspirating needle was inserted into it, but only a small quantity of dark thick blood was thus removed. The right renal tumour varied in consistence from day to day. The temperature oscillated, being frequently as high as 103°, and the pericardial friction kept returning and disappearing; the reappearance of the friction was attended by severe dyspnoea, great pain, an unusually rapid pulse, but not always by rise of temperature. Oedema of feet and legs gradually developed; the grasp of the right hand became weak, and she complained of a sensation of pins and needles in it. This was followed by complete paralysis of the flexors of the right fingers, accompanied by anaesthesia over the area supplied by the median nerve.

From this date onward there is a record of recurrent attacks of cardiac pain, of the appearance and disappearance of pericardial friction, also a history of repeated attacks of epistaxis and of extension of oedema in the legs. The paralysed right hand became cedematous, the urine diminished; the amount of albumen increased, and the oedema, gradually creeping up the legs, ultimately involved the abdominal wall. Epistaxis kept recurring, the urine gradually diminished, and the patient died comatose.

Necropsy.—Body emaciated. No trace of tumour was noticed externally on the chest wall, but a distinct bulging was observed in the right lumbar region. Legs very cedematous, also skin of trunk. On reflecting skin of chest, no trace of cyst cavity could be detected, but about 1 inch below the right sterno-clavicular articulation there was a localised accumulation of connective tissue. The right lung was adherent to the chest wall near the sternum, and to the pericardium. Pleura contained fluid, dark and bloodstained. Nothing was noticed in the pleural cavity which could explain the pulsating tumour on the chest wall. Both lungs were cedematous. Pericardium was generally adherent to the heart. The wall of the left ventricle was thick; cavity slightly dilated; valves healthy. Bronchial glands cheesy. The abdomen contained a large quantity of coffee-coloured fluid.

Occupying the right lumbar region was a tumour the size of a coconut, firmly adherent to the intestines. On removal it was found to be the kidney, which had undergone alteration, nearly the whole of the tumour being composed of blood lying loosely, or in small loculi. Very little kidney structure remained save a delicate grey streak at the periphery. The left kidney was extremely contracted although the capsule was easily removed, leaving a granular surface behind it. The liver was normal in size, but on section small masses of a yellowish white substance were seen surrounding the biliary canals. The liver was nutmeggy, but irregularly so. There was no growth on the surface of the liver, nor was any new growth detected in the abdomen; gall bladder healthy; no biliary calculi; no obstruction to biliary flow noticed; spleen, Fallopian tubes, and ovaries were healthy.

On microscopical examination of what is left of kidney structure in the renal hæmatoma, there is observed very marked tubular nephritis. The secreting cells are very much enlarged and granular, and at places are breaking down, the *débris* occupying the interior of the tubule. The Malpighian glomeruli are enlarged; their capsule is thickened. At places the interstitial tissue is increased. Here and there in the section the fibrous tissue is so much increased and laminated, that it looks as if it was composed of shrunken compressed tubules. It is this thickened tissue that forms the lining of the cyst which contains the blood; the other part of the section simply shows blood clot, blood cells, and blood crystals. The left kidney is the seat of interstitial nephritis; the liver is fatty, and the seat of very marked interstitial hepatitis in patches; the increase of fibrous tissue surrounds the biliary vessels, and is the explanation of the numerous yellow foci noticed by the naked eye when the liver was divided.

The pathology of this case is somewhat obscure. Can it have been one of masked hæmophilia? The development of a blood tumour in the chest wall, the recurrent epistaxis and hæmaturia, and the presence of blood in the pleural cavity and in the right kidney—all these suggest this as a possible explanation. Against these must be placed, however, the absence of bleeding in the family history, although it is to be remembered that patient's mother died of apoplexy (? cerebral hæmorrhage) at the age of 38, and the existence of left-sided interstitial nephritis and biliary hepatitis in the patient herself. Disease of the kidney, by attenuating the blood, may have allowed it to ooze more easily out of the blood vessels, and thus a tendency to bleeding became established, which was not without its influence in hastening the fatal termination.

THE hundredth anniversary of the birth of the great naturalist, Karl Ernst von Baer, was recently celebrated with much pomp and circumstance by the University of Dorpat.

DRS. L. MEURER AND ALBERTIN, of Lyons, have been commissioned by the French Government to study the organisation of the principal surgical and ophthalmological clinics of Germany and Austria-Hungary.

ABSTRACT OF A LECTURE ON THE TREATMENT OF METRORRHAGIA,

Delivered at the Chelsea Hospital for Women,

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CASES of uterine hæmorrhage which baffle every attempt to relieve, and cause much worry and anxiety at the time, are often met with.

It will be my endeavour to offer suggestions calculated to assist in the management of these cases. Of all the organs in the body the uterus is the only one from which blood flows at periodical intervals as a normal physiological process. It is only when the discharge becomes excessive, or recurs with too great frequency, that we are called upon to deal with it as a pathological process. Uterine hæmorrhage must not be regarded as a disease or entity *per se* for which one method of treatment is universally applicable. Nor must we regard it as an invariable evidence of disease, for it may be merely an expression of constitutional or general vascular tension, the uterine mucous membrane acting, so to speak, as a safety valve, a smart attack of hæmorrhage often serving to avert a still more serious effusion from the ovary or its surrounding plexus into the peritoneal cavity, or even an attack of apoplexy at the so-called "climacteric period," the uterine hæmorrhage being beneficial, and often affording a useful hint as to treatment. Although, as I have suggested, hæmorrhage is but a symptom and not a disease, still the practitioner is often compelled to regard this symptom from a clinical point of view.

A correct diagnosis is the first and most important element of successful treatment, for, until we know the former, the latter is but mere guesswork, and we are just as liable to do harm as good in attempting to repress the hæmorrhage.

The principle of diagnosis by exclusion is one which approves itself to many, determining, in fact, to what cause the hæmorrhage is *not* due. This, of course, can only be done by knowing beforehand what are the most likely causes of severe or protracted hæmorrhage—the possibilities, so to speak—and then eliminating one after the other until we have left only two or more probabilities.

In attempting to arrive at a correct diagnosis it is of great importance to get as clear and concise a history of the attack as possible. This alone will not infrequently enable us to differentiate a uterine fibroid from a pelvic hæmatocoele, or a miscarriage from malignant disease, and in any case a reliable history is always of service.

The mere fact of a patient giving even a few weeks beyond the time at which the menstrual period should have occurred and then coming on profusely unwell should put us on our guard as to the probability of impregnation having taken place with subsequent detachment of the ovum and partial expulsion. Even where we get a history of an early miscarriage, we must be careful not to overlook the possibility of an extrauterine gestation, the decidua membrane having been thrown off, and not an ovum as supposed. It is of great importance to examine carefully everything passed by the patient from the vagina in the form of clots and *débris*. A miniature cyst no larger than a currant may be sufficient to suggest to our minds the presence of cystic degeneration of the villi of the chorion. A shred of membrane, decidua in character, may suggest the expediency of inquiring very carefully into the history lest we unwittingly overlook a case of extrauterine gestation.

Before resorting to a vaginal examination with the view of detecting some local cause for hæmorrhage it should, as a matter of routine, be the invariable custom to ascertain first the condition of the principal organs, more especially the heart, liver, and kidneys. Many cases of profuse metrorrhagia, seen in consultation, have been found to be due to some cardiac mischief, hepatic congestion, or renal complication, and not at all to any uterine disorder. In fact, the gynaecologist must be a good "all round" practitioner, with special experience in diseases of women, not a mere specialist who can see nothing amiss in a patient except through a vaginal speculum, if he would understand how to deal successfully