globed corpuscles are probably best seen by Biondi's reagent (after suitable hardening). Apparently by a chemiotactic action, certain of the red corpuscles are selected and attracted within the phagocyte cells (for such they may be called). They can be seen passing inwards and at first cannot be distinguished in any respect whatever from those in the vessels outside. Gradually they assume a greenish-brown coloration, and thereafter begin to break up into larger and smaller particles. The nucleus of the phagocyte is usually much obscured by the pigment particles, but it is large, and together with the protoplasm may show signs of formative activity.

I have no hesitation, therefore, in formulating the opinion that *one at least of the functions of the suprarenal gland is the destruction of a certain class of effete red blood corpuscles.* It is seen that not only do these cells separate pigment, but they absorb and destroy the stromata as well. In all probability this is effected by means of a ferment.

The part played by the medulla is of great importance, but I am unable to enter at length on it here. Three kinds of cells may be made out: namely, glandular columnar or polyhedral cells, faintly eosinophilous, and with frequent very large round or oblong nuclei; these are regularly arranged in the meshes of the reticular network; secondly, a highly-branched corpuscle, with peculiar staining reactions and absolutely non-eosinophilous; these seem to be modified nerve cells; and, lastly, ganglion cells proper, which both cluster round large nerves which pass straight through the cortex and likewise exist in isolated fashion in the reticular meshes. It is no doubt an office of the medulla to test the quality of the blood, which, so far purified by filtration in the pigmented zone, passes through it ere it enters the circulation, and certain appearances have led me to suspect that it is concerned in the further reduction of effete substances. The blood, after passing through the medulla, has the characters of arterial oxygenated blood, as an examination of the contents of the adrenal veins shows.

Fig. 2.—250 diams. Three acini are seen in the diagonal from the lower right hand corner. They are lined with semicolumnar cells and contain a fluid mingled with a few desquamated cells.

Being, therefore, in part at least, an *excretory* or *depurative* organ, the symptoms of blood poisoning which characterise Addison's disease become at once intelligible, whilst the pigmentation of skin, etc., is due to the circulation of certain decomposition products of hæmoglobin. In a future paper I hope to make clear this sequence, and likewise to

explain the apparent anomaly of the occasional absence of pigmentation in certain cases of destruction of the adrenal bodies.

A brief reference may be here made also to the outer cortical zone (*zona glomerulosa* of authors). Its cells are but moderately eosinophilous—in this respect contrasting with those of the columns of the middle zone—and their nuclei readily absorb logwood. Although the acini are usually entirely filled with cells, I have seen under favourable circumstances a considerable central lumen filled with secretion. The appearance much resembles that found in the anterior lobe of the pituitary body. This secretion is carried away by lymphatics to minister to certain needs of the organism.

[I must express my great indebtedness to Dr. Thomas Reid, surgeon to the Eye Infirmary, to whose kindness and skill the original photographs are due.]

A CASE OF CONGENITAL HYDROCELE OF THE NECK: CURED BY DRAINAGE AND COMPRESSION.

By GEORGE DICKINSON, M.R.C.S.ENG., L.R.C.P.LOND.,
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C. I., aged 3, was a healthy, intelligent-looking male child, living in the country. Dr. Davis, of West Hartlepool (in whose practice the case occurred) attended the mother at the birth of this child, and then noticed a swelling about the size of a walnut in the lower part of the neck, in a vertical line with the ear. The mother reported that the swelling

Fig. 1.

had gradually and uniformly increased in size to the present time, and that she had never been able to let the child run about with the other children for fear of injuring the tumour. These other children were all healthy and free from deformity.

When first seen by me, in November, 1892 (three months before the operation) the cyst had become inflamed after a slight blow, and threatened to suppurate; this inflammation, however, subsided under hot applications.

On February 22nd, 1893, the cyst appeared as a soft, white, fluctuating swelling (Fig. 1), translucent and pearly owing to the thinness of its walls over the posterior half, having no veins apparent running over it, and becoming alternately tense and soft during crying or coughing. It extended from the sternal end of the left clavicle in front to the middle line behind, and quite filled up the sulcus between the neck and the shoulder, looking like a swimming collar, and overhanging the clavicle in front.

Having carefully cleansed the scalp and surrounding parts, and the child having been chloroformed, a trocar carrying a cannula was put in at the posterior and thinner part. About 3 ounces of dark, greenish-brown, highly albuminous fluid, looking like bile-stained urine, escaped, with little or no force, the child breathing tranquilly at the time.

A small incision, sufficient to allow entrance to the little finger, was made in the position of puncture, and through this the cavity was explored. The sterno-mastoid muscle in the front wall of the cyst felt thin and atrophied; the carotid artery lying by the trachea, and the subclavian passing over the soft lung, were felt quite hard and clear, and apparently having no covering, but lying free in the cyst. No constriction or obstacle was felt to prevent the finger following the arteries downwards behind the sternum to the arch of the aorta, which was felt pulsating vigorously, and, as far as one could tell by the feel, quite bare. At this stage the child showed signs of shock, turning pale, and respiration ceasing. After two efforts at artificial respiration, natural breathing was resumed. No further attempt at exploration was made, but a second small incision in the cyst wall, about 2 inches in front of the former one and 1 inch behind the posterior border of the sterno mastoid, was made.

A piece of thin drainage tubing, passed in at one hole and out at the other, was found to be too rigid, crumpling up the thin wall between. A seton consisting of five or six strands of fishing gut was therefore put in, and the ends tied together. A good pad of absorbent gauze was bandaged firmly over the site of the collapsed cyst. The wound was dressed on alternate days up to March 7th (thirteen days after the operation). At the earlier dressings a considerable quantity of blood-stained serum escaped and soaked the dressings, but the openings drained well, and not more than three-quarters of an ounce was ever found pent up. At the later dressings the character of the discharge became altered to a muco-purulent fluid, owing, no doubt, to sepsis, and from March 7th the temperature began running up at night, and the child suffered somewhat in general health. The seton cut out, and the wound continued to discharge more or less freely till March 29th (five weeks after operation), when it had healed, and there was no appearance of any swelling or recurrence. The child rapidly regained its health.

INTRA- AND EXTRAUTERINE FŒTATION AT FULL TERM: CÆSAREAN SECTION (PORRO).

By GEORGE C. FRANKLIN, F.R.C.S.,
Leicester.

On June 21st, 1893, I was sent for by Dr. Hanly, of Desford, Leicestershire, to see Mrs. C., who was in labour (at full time), and had apparently some obstruction at the pelvic brim. I arrived about 9 p.m. with my friend, Mr. P. Paget, who was then house-physician at the Leicester Infirmary, and whose help was most valuable.

Mrs. C., aged 33, had had five children, and always lingering labours; on this occasion she had been in labour eighteen hours. She was found in a small room on the first floor of a cottage, lighted by a small lamp and candles. She was very ill, collapsed, with pale and sunken face and anxious aspect. The pulse was 100, and fairly good. The abdomen was very prominent, especially above the umbilicus, and tense; there was dulness on percussion in both flanks; palpation gave no information. On vaginal examination, the os uteri could not

be felt either by the finger or hand. The vaginal wall was swollen and œdematous.

A hard mass, about the size of a cocoanut, could be felt exactly above, apparently pushing over the posterior vaginal wall so as almost to give the impression that it was the anterior wall. This mass was evidently between the finger and the os uteri, and had lifted the cervix beyond reach. It was slightly movable and elastic, and gave the impression of being a large sarcomatous growth filling up the pelvis. Rectal examination gave no additional information. The bowels had been freely open; there had been trouble for some time in micturition.

It was decided after consultation to open the abdomen immediately. Chloroform was administered by Dr. Hanly, as, at Dr. Hanly's suggestion, everything requisite had been brought. An incision 6 inches in length, commencing half an inch below the umbilicus, was made through the abdominal wall, which was as thin as parchment. The second incision completely opened the cavity; about 2 ounces of blood escaped at once from the peritoneal cavity. The uterus presented, and it was noticed that the placental attachment was in the anterior wall, exactly where the incision should be made. The india-rubber ligature was now slipped over the fundus and brought gradually into the pelvis below the uterus and appendages.

An incision about 6 inches in length was made in the uterine wall; a rush of blood followed. A full-term, living, male child was easily extracted together with the placenta. The ligature being now tightened the hæmorrhage at once ceased. A stout wire *écraseur* was substituted for the india-rubber ligature, and during its application there was some more bleeding. The uterus and appendages were now removed. For safety a stout silk ligature was also passed round the stump in case the *écraseur* should slip. So far the condition of the patient was no worse than at the beginning of the operation, and she took the chloroform well.

Having now secured the uterine stump attention was directed to the pelvis, out of which rose a huge swelling, and from which hæmorrhage was rather free.

On manipulation the tightened capsule of this supposed growth ruptured, and a dead full-term fœtus was liberated, the vertex being in Douglas's pouch behind the uterine stump. The fœtus was rapidly removed, and this was fol-