whose function is not being exercised we might expect them to succumb readily to the attacks of micro-organisms. Phagocytosis under such conditions is likely to be at a minimum.

In some cases of pneumococcal infection of the fetus the mother has apparently suffered from no infectious disease. Don³ recently reported a case of antenatal lobar pneumonia in which there was no apparent antecedent infective condition in the mother. Except for feelings of chilliness four days or so before delivery, she felt perfectly well. Cases such as this show clearly that the placenta does not always act as a filter in preventing pathogenic organisms from reaching the fetus.

REFERENCES.

- ¹ Ballantyne's *Antenatal Pathology and Hygiene*, vol. i, p. 221.
² Muir and Ritchie's *Manual of Bacteriology*, 3rd edition, p. 197.
³ Don, *Journal of Obstetrics and Gynaecology of the British Empire*, vol. xvii, No. 5, p. 429.

A CASE OF HAEMOCHROMATOSIS, OR PIGMENTARY CIRRHOSIS OF THE LIVER WITH GLYCOSURIA.

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HAEMOCHROMATOSIS, or bronzed diabetes, is a rare and interesting disease which was first described by Hanot in the year 1882. According to Fletcher, the three cardinal symptoms are:

1. Pigmentation of the viscera and of the skin.
2. Cirrhosis of the liver, almost invariably hypertrophic in type, and accompanied by striking pigmentation of that organ.
3. Diabetes mellitus, which develops at the final stage of the disease, and is due to a late pigmentary cirrhosis of the pancreas hindering the glycolytic function of that organ.

The pigmentation resembles that of Addison's disease, and two kinds of pigment have been described—haemosiderin, which contains iron and is found in the liver, glands, and skin; and haemofuscin, which does not contain iron, and is present in some of the other organs.

The cause of the haemochromatosis is a disputed point. According to some observers the diabetes is primary, the destruction of red blood corpuscles leading to the formation of pigment in the skin and viscera. The majority, however, consider the cirrhosis to be primary, and that the diabetes arises at a very late stage of the disease from extension of the cirrhosis to the pancreas, causing destruction of the islands of Langerhans.

The following case is a good example of the disease:

A widow, E. P., aged 69, was admitted to St. Pancras South Infirmary on November 28th, 1910, complaining of increasing weakness.

History of Present Illness.—Four years ago she began to suffer from thirst, and for the last three years had had incontinence of urine. Previous to the onset of this illness she had been a stout, well built woman weighing about 14 st.; but during the past year she had steadily lost flesh, and for the last three months had wasted rapidly. Always a good eater, she was now noticed to eat ravenously whatever food was put before her, and for the three months previous to admission she had lost control over the sphincter ani. She became increasingly feeble, and two weeks ago was forced to go to bed.

Previous History.—She was born and had always lived in London. Her circumstances were good, and she was always partial to rich food. She habitually took beer and spirits, and was more than a moderate drinker, but her relatives had never known her get intoxicated. There was no history of a shock or of worry. Two or three years ago she fell on to the back of her head whilst alighting from a tram, but beyond a localized swelling over the occiput nothing further developed.

Previous Illnesses.—When a child she had scarlet fever and measles, twenty years ago she had an attack of erysipelas, and three years ago she was laid up with influenza.

Family History.—There was no history of diabetes or consumption in the family. Her mother died of cancer of the uterus, her father of old age.

Condition on Admission.—The patient was emaciated and feeble, and appeared to be seriously ill. What struck me most was the curious pigmentation of her face, which was of a leaden hue, except for a flush over the malar prominences and in the centre of the forehead; the pigmentation was deeper over the temples. The skin as a whole was more dusky than normal, and the front of her neck, her forearms and the dorsal aspects

of her hands were bronzed in colour, whilst the upper half of the anterior aspects of both thighs were a dull grey hue. The skin was very dry and scaly. Above the left nipple two irregular-shaped hard tumours were present, each the size of a small plum, freely movable and not adherent to the skin or underlying structures, but connected with each other by a strand of tissue, so that traction upon the one produced movement of the other. The axillary glands were not enlarged. The cardiac dullness was not increased, the heart sounds were clear, and no bruits were present. The lungs were resonant and the air entry good. The liver dullness began at the level of the fourth rib and extended downwards in the nipple line as far as four fingerbreadths below the costal margin, where the sharp edge of the liver could be distinctly felt. On palpation the surface of the liver appeared to be smooth, firm, and not painful. The spleen could not be felt. There was no evidence of any ascites. The feet and legs were markedly oedematous. Superficial ulcerative vulvitis was present and the glands in the left groin were enlarged. The urine was clear, amber coloured; specific gravity 1030, acid in reaction; sugar was present.

Further History of the Case.

Throughout the patient's temperature remained subnormal and incontinence of urine and faeces persisted. She slept well, took her food with relish, and complained of nothing but of feeling weak.

The amount of sugar per diem averaged 26 to 30 grains to the ounce. She daily grew weaker, and on December 19th vomited a small quantity of thick fluid. The following day she suddenly became comatose, was infused with 3 pints of sodium bicarbonate (1 drachm to the pint of 0.7 saline), but never regained consciousness, and died a few hours later. On the day of her death the urine contained 30 grains of sugar to the ounce.

Post-mortem Examination.—The body showed marked wasting. There was practically no fat in the subcutaneous tissue covering the chest. The naked-eye appearance of the cut section of the breast tumour was that of a fibro-adenoma with calcareous degeneration in places. The heart weighed 8 oz.; the pericardium and epicardium were adherent near the apex; the myocardium was pale and soft; the valves appeared normal. The lungs: The surface was everywhere smooth and shining, and no adhesions were present. The right lower lobe was congested posteriorly. The peritoneal cavity contained 2½ pints of turbid greenish fluid with no flakes of lymph; the peritoneum was congested, showing dilatation of the vessels; its surface was smooth and glistening. The liver weighed 109 oz. There was no perihepatitis; the surface was nodular, becoming finely granular towards the lower margin. In colour the liver was a rich chocolate brown, shading into a deep slate blue on the anterior and posterior surfaces of the left lobe near the lower edge. Situated on the anterior aspect of the left lobe was a small superficial abscess the size of a cherry, containing caseous matter. The hepatic tissue was much harder and tougher than normal. The gall bladder was dilated, and contained clear, straw-coloured fluid with six minute black stones, each roughly the size of a pin's head. The mucous membrane was dark red, roughened, and granular in appearance. The spleen weighed 10 oz.; the capsule was thickened and slate coloured. The kidneys weighed 5½ oz. and 4½ oz. respectively; the capsule stripped easily, leaving a smooth surface; the parenchyma was tougher than normal. The pancreas was very adherent to surrounding structures, and showed nothing abnormal to the naked eye.

I am indebted to Miss Chambers, M.D., Pathologist to the Royal Free Hospital, for the following histological report:

The liver is in a condition of finely granular cirrhosis. The capsule is thickened, and sends prolongations down into the deeper tissue. There is an extensive deposition of pigment in all the liver cells, most markedly in the cells of the outer zones of the lobules. The bile ducts are not increased in number, or dilated or inflamed. The pancreas shows chronic interstitial pancreatitis, the lobules are separated by thick strands of fibrous tissue. The cells of the pancreas appear to have proliferated, many are degenerate, and contain fat and pigment granules. The smaller pancreatic ducts show no inflammatory changes. The spleen is in a condition of chronic fibrosis. The trabeculae are thickened, and pigment can be found in a few places.

Apart from the rarity of the disease, the chief interest of the case lies in the fact that the patient was a woman, for, in an article by Professor Osler on Haemochromatosis in the BRITISH MEDICAL JOURNAL for December, 1899, it is stated that no case had been reported to have occurred in a female. The weight of the liver is also remarkable.

In conclusion, I would here wish to thank Dr. Thackray, the Medical Superintendent, for his courteous permission to record this case.

THE order of the London County Council adding acute poliomyelitis or polioencephalitis to the list of notifiable diseases in the administrative county of London, which came into operation on September 1st, will continue in force until March 12th, 1912, and may be renewed.

THE Medical Directory of New York, New Jersey, and Connecticut, for 1911, just issued by the Medical Society of the State of New York, contains the names of 17,624 registered physicians, as against 17,416 in 1910.