necessity of the division of the sac, as may occur in rare cases. The history of the case, the presence of a "palpable, definite, resonant mass, slightly movable, but not on respiration, and gurgling on auscultation," with retraction of the region corresponding to the colon, would permit a probable diagnosis to be made. No coils of intestine were visible.

As pointed out by Moynihan and Dobson, the plica venosa forms the upper anterior and lower boundaries of the orifice of the sac. This fold contains the inferior mesenteric vein, but in this case there was no obvious implication of the haemorrhoidal veins, nor was any collateral circulation developed in the abdominal wall.

It will be noted that the patient ascribed her condition to an accident. According to Treitz, duodenal herniae are always acquired, being caused by a violent effort, such as a blow, shock, or concussion. Landzert, on the other hand, states that these herniae are always congenital. Moynihan and Dobson state that all the essentials for the development of hernia are present in intrauterine life, and that the hernia is chronic, whether congenital or acquired, the strangulation alone being acute. Cases have been recorded as early as the ages of 14 days and 3 months.

No attempt was made to suture the hernial opening owing to the condition of the patient. This procedure involves two risks: one is that of injury to the mesenteric vessel, and the other the formation of a large peritoneal cyst.

III.—INTESTINAL OBSTRUCTION FROM GALL STONES.

In the following case delay in operation was due to the difficulty of diagnosis, or rather perhaps to the failure to recognize the condition. The onset was one of overwhelming violence. The patient was extremely obese. There was also a curious intermission in the symptoms, in which pain and vomiting ceased and flatus was passed. The latter was probably due to reversed peristalsis, making the calculus slip backwards, and thus removing the obstruction.

Gall stones most frequently cause obstruction by impaction, but they may also cause obstruction indirectly by producing volvulus, and by their pressure they may cause ulceration of the gut and subsequent stricture. Obstruction from gall stones may occur anywhere from the pylorus to the anus.

Mrs. M., aged 55, admitted August, 1921. Two or three days before admission she had an attack of violent abdominal pain, accompanied by vomiting and the cessation of the passage of flatus. On admission the vomiting had ceased and flatus was being passed, and this caused further delay in operating. The symptoms of obstruction recurred, and operation was performed. The gall bladder was thickened and shrunken, and a gall stone the size of a large walnut was found impacted in the lower ileum. This was removed, and distended coils of intestine were emptied at the poisonous proteose level of Wilkie. The patient did not recover.

IV.—INTESTINAL OBSTRUCTION FROM UTERINE FIBROID.

An unusual cause of acute intestinal obstruction is a fibroid tumour of the uterus. According to Bland-Sutton, uterine fibroids may obstruct the intestine in three ways:

1. A pedunculated subserous fibroid may entangle a loop of small intestine and lead to fatal obstruction.
2. A very large fibroid may rest on the brim of the pelvis, thus obstructing the sigmoid flexure.
3. An impacted tumour may press upon the rectum, and lead to obstinate constipation and chronic obstruction.

The following is an example of the second variety:

Miss B., aged 50, admitted to hospital May 10th, 1921. The day before admission severe pain set in in the abdomen. Vomiting was persistent and continuous. On admission a huge myoma occupied the pelvis and well filled the abdominal cavity. Operation was at once performed. No bands or adhesions were present. Access to the broad ligaments was very difficult. The bladder, therefore, was detached from the anterior wall of the uterus, and the cervix was divided by passing a scalpel from the anterior to the posterior surface in the middle line, and cutting outwards toward the uterine arteries. It was not very difficult then to divide the broad ligaments from below upwards, thus rapidly removing the uterus with its appendages. Recovery was rapid and complete.

V.—INTESTINAL OBSTRUCTION FROM HERNIAE.

Cases of intestinal obstruction from inguinal or femoral herniae, if the patient is feeble or *in extremis*, may be treated as follows:

Using Gray's syringe, infiltrate the skin and subjacent tissues with novocain 1/2 per cent. Incise the skin, open the sac; if the bowel is gangrenous incise it also, but if in good condition dilate the constricting structure with the index finger, and return the hernia or not, as seems advisable. Incision from within is unnecessary in dealing with the constricting ring in any strangulated hernia. Digital stretching is sufficient and safer.

The stethoscope is of much value in the diagnosis of various abdominal conditions, and in intestinal obstruction it is not difficult to recognize the passage of intestinal contents through wide or narrowed parts of the bowel.

The chief points in the diagnosis of acute intestinal obstruction are: (1) continuous and persistent vomiting; (2) no passage of flatus in twenty-four hours, notwithstanding appropriate treatment; (3) increasing abdominal distension. We must not wait for the onset of so-called faecal vomiting. It is a sure sign of intestinal obstruction, but it is also a clear indication that death is imminent.

A CASE OF ANGIOCHORIOMA.

BY

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PLACENTAL tumours of the angiochoriomatous type are so rare that the following case, which occurred in the district practice of the City of London Maternity Hospital early this year, appears of sufficient interest to merit report.

The tumour which we now know as an angiochorioma was first described by Virchow as "myxoma fibrosus placentae," and since his publication only a few score cases have been recorded, the majority of these being from maternity hospitals where careful note is being kept of any abnormality. It may, therefore, be a somewhat commoner condition than the records would indicate.

These tumours arise from the chorion, probably very early in pregnancy, and their localized condition has been held to mitigate the possibility of a maternal cause. Some writers have, however, suggested an inflammatory origin and syphilis has been incriminated as an etiological factor, without much weight of supporting evidence. An interesting explanation of their causation was offered in a paper read before the Annual Meeting of the British Medical Association in 1912, by R. W. Johnstone,¹ who suggested that obstruction to venous return from an area of the placenta might bring about the angiomatous condition.

Apart from the area invaded by the tumour, the placenta is usually quite healthy and functions normally. Hydramnios may coexist and the foetal mortality does not exceed 0.30 per cent.

Clinical History.

The patient was a multipara, aged 42. The pregnancy was normal except for an unusual degree of pallor, and during the pregnancy a painful "thickening" behind the left knee was noticed. She was delivered of a healthy full-term child. During the third stage of labour there was a free loss of blood, but insufficient to be termed a post-partum haemorrhage. Examination of the placenta showed the presence of a tumour. Five days after labour phlebitis and thrombosis of the left popliteal vein occurred: the temperature was 101° F. and the patient complained of a persistent right hemispherical headache. The uterus was well involuted. The heart was slightly dilated and haemic murmurs were noted. The blood pressure was 98 mm. No albumin was present. A blood count gave the following result: red cells 3,100,000 per c.mm.; haemoglobin 42 per cent.; leucocytes 13,100 per c.mm.; differential count: polymorphs 81 per cent., lymphocytes 15 per cent., large mononuclears 4 per cent.

* BRITISH MEDICAL JOURNAL, 1912, ii, 1113.

Three days later vomiting occurred and persisted for twenty-four hours. The lochia were offensive, although there was no uterine tenderness. Coliform bacilli and streptococci were isolated from a vaginal swab and a vaccine was prepared. A low pressure antiseptic vaginal douche was given daily. Ergotin was given hypodermically and iron and arsenic were administered by the mouth; six days later the patient was much improved and the thrombosis was resolving. She was discharged from hospital twenty-five days after parturition.

This was the patient's ninth pregnancy. During the previous pregnancy an unusual degree of pallor had also been noted and parturition was followed by a fairly large loss of blood and slight sepsis during the puerperium. There is therefore evidence of a pre-existing uterine infection. No evidence of syphilis was noted.

The Placenta.

The placenta measured 21 cm. by 17½ cm. and was of the battledore variety. On the foetal surface a tumour 9½ cm. by 8 cm. was present which projected some 4 cm. from the surface of the placenta. It was roughly reniform in shape and a few vessels could be traced from the insertion of the cord to ramify in its substance. The membranes extended evenly over the surface of the tumour except at one pole where there was slight distension by blood clot.

On section the placenta was yellowish-pink in colour, had a rather myxomatous appearance, and appeared homogeneous in structure. Blood vessels were fairly numerous. The maternal surface showed a smooth area about 13 cm. by 9 cm. subjacent to the tumour, over which the cotyledons were compressed and flattened. The remainder of the placenta appeared normal except that the sulci were unusually well marked, and the cotyledons much separated. Here and there between the cotyledons were small collections of blood clot, but no distinct "ponds" suggestive of ante-partum haemorrhage.

Histological Examination.

The histological structure of the tumour varied considerably in different areas. Some showed numerous and massed capillaries, with walls of a single layer of endothelium, embedded in a rather myxomatous-looking stroma. A few arterioles and venules were present. Other areas were predominantly cellular with few capillaries. The cells present were mainly young connective tissue cells, but a few scattered eosinophils were also seen. One or two nucleated red cells were noted in the capillaries.

The only factor which may be of etiological importance in this case is the evidence of pre-existing uterine infection.

We are indebted to Mr. Comyns Berkeley, Obstetric Surgeon to the City of London Maternity Hospital, for permission to publish this case.

HAEMOPHILIA IN THE FEMALE.

BY

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THE following case is of interest on account of the rarity of haemophilia in the female. The patient, a woman aged 47, was admitted to the Cancer Hospital with carcinoma of the breast, and stated that she was a "bleeder." The family tree is shown in the accompanying chart and the following details have been ascertained.

According to family tradition the disease is traceable through the paternal grandmother from her father to her son, the patient's father. The latter exhibited a great tendency to bruising and had epistaxis about every two weeks. Trivial injuries frequently caused swelling of the joints, one or other of which was almost constantly affected. Death is thought to have been due to haemorrhage connected with fracture of the leg, which occurred shortly before, "fragments of bone working out with much bleeding."

The patient's five brothers were all normal and their children are believed to have been unaffected. Of the five sisters of the patient three were normal; one died, with a son aged four months, from "blood poisoning"; and in one the history as to haemophilia is wanting.

With regard to the sisters' children, the eldest sister (Mrs. G.) had seven daughters, all of them normal, and seven sons, three of whom were alive and healthy, while four were supposed haemophiles. Of these four, one (F. G.) spent most of his life in hospital with bruises, epistaxis, joint affections, etc., and died in 1905 in the Fleming Memorial Hospital, Newcastle; the second died at the age of 2 years from "bleeding," the source of which is not known; the third, said to have been a "bleeder," died in France from haemorrhage after a wound; the fourth (A. G.) was recently in the Royal Victoria Infirmary, Newcastle, with a haematoma of the size of an orange under the scalp, the result of a kick. The tumour still fluctuated and coagulation seemed absent although the injury had been inflicted a month previously. There was also a history of

frequent treatment for bruises, bleeding from the gums, swollen joints, and "lumps appearing after the slightest knocks."

The second sister (Mrs. T.—interviewed) had four daughters, all of them normal, and four sons, "bleeders." Of these four, one (G. T., aged 35—interviewed) is rarely free from swelling of some joint, most frequently the knee, and suffers readily from bruises, which sometimes bleed for hours, and from epistaxis and rectal haemorrhage (bright blood). In the London Hospital in 1920 he bled for a fortnight from a deep cut in the thumb, for which horse serum was given by the mouth and locally. In St. James's Infirmary, Wandsworth, in 1922 he was seriously ill after the extraction of two neighbouring teeth, and plugging had always been necessary after tooth extraction. The second son (P. T.) had attended the Yarmouth Hospital most of his life for joint affections, epistaxis, etc., and at the age of eighteen months had nearly bled to death from a slight cut on the chin. He died in the Yarmouth Hospital in 1912 at the age of 11 years, from haemorrhage from a cut of the finger, due to a fall on the beach. The third son died at the age of 4 years. He had tripped on the stairs, without sustaining any serious injury, and the next day vomited blood and died within twenty-four hours. The fourth son died at the age of four months from some unknown cause. At birth there had been troublesome haemorrhage from the umbilical cord.

The third sister had one daughter, normal, and a son who died at the same time as the mother (blood poisoning) at the age of four months.

The fourth sister had one daughter, normal.

The youngest sister had one son and one daughter, both normal.

Chart of family of F. C. (1) D=known to have died. (2) The order of the children in generation below that of patient is not known.

The patient's history is as follows: At the age of 10 years she was found unconscious from bleeding following tooth extraction performed a few hours previously; she remained in the Yarmouth Hospital about three weeks. On a subsequent occasion she suffered from severe haemorrhage from a cut of the thumb, for which she was treated in the Middlesex Hospital. At the age of 21 an abscess in the labio-gingival fold was opened; severe haemorrhage followed in spite of plugging and she was in bed for two weeks. She always had a great tendency to bruising, but only after definite injury. At the birth of her son (F. C.) she suffered from post-partum haemorrhage. The son died at the age of 5 years in St. Mary's Hospital, Paddington, the following being the notes of the case: "May 22nd, 1910: Onset of bleeding from rectum 7 p.m., continued all night. May 23rd: Admitted, blanched and collapsed. Died thirty hours after onset. No necropsy allowed." In view of the certain diagnosis of carcinoma of the breast, it was decided, after discussion with the patient, to take the risk of an operation, as the patient's general condition was satisfactory and the blood count showed only a mild secondary anaemia. The coagulation time was between 3 and 3.35 minutes at 37° C. By way of pre-operative treatment 30 grains of calcium lactate were given by the mouth every other night, and artificial anaphylaxis induced by a subcutaneous dose of 5 c.cm. of horse serum, followed thirteen days later by 1/2 c.cm. There was some urticaria around the site of the original injection, with headache and malaise. The coagulation time after this was between 1.40 and 2 minutes at 37° C. At the operation bleeding was free but not excessive, and the wound was swabbed with horse serum before closing. There was little shock after the operation. Blood-stained serum oozed freely from the stab wound from the tube for three weeks, and slightly for nearly three weeks longer. Healing was slow, but otherwise convalescence was uneventful.

In an extensive and interesting monograph on haemophilia Bullock and Fildes (Eugenics Laboratory Memoirs, No. XII, 1911) describe three types of haemophilia as