occurred twenty-eight days after his admission to hospital. The condition shortly before death was a very striking one, both as regards his facial appearance (Fig. 2) and his many metastases (Fig. 3). The partial post-mortem examination was a somewhat unsatisfactory one. The entire right nostril was filled with a soft hæmorrhagic carcinomatous mass, which extended on to and involved the upper gum and spread backwards to the base of the skull in the pharynx. It was not noted that the septum was destroyed, nor was the antrum of Highmore obviously affected.

Here, obviously, the condition appeared in the roof of the nose. By the time it had progressed sufficiently to cause symptoms of hæmorrhage and nose obstruction the disease had far advanced towards a copious metastatic involvement.

The tumours in the two cases presented a certain similarity in their softness, their vascularity, and their rapidity of growth. As regards their origin there was but little difference; as regards their clinical course there was practically no similarity. In the first case the growth progressed rapidly to enormous destruction, with no glandular involvement and no secondary growths; in the second case, though the primary growth was certainly not slow, it was extraordinary how rapidly secondary involvement set in and how extensive and general it became. According to Pirie and Skirving's paper metastases are not common; perhaps when they occur they are unusually rapid and extraordinarily widespread.

A CASE OF INTRA-PERITONEAL HÆMORRHAGE FOLLOWING ENDOCARDITIS AND MESENTERIC EMBOLISM.

By J. W. STRUTHERS, F.R.C.S.,
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Miss A. R., aged 19 years, was admitted to the Royal Infirmary on Sunday, 30th October 1910, in a state of grave collapse. The history of her illness was briefly as follows:—For 6 months before her admission she had suffered from chlorosis, latterly attended by dyspepsia, and had been under treatment for this at the Cowgate Dispensary. Cardiac murmurs, presumed to be hæmic in origin, had been present, and menstruation had been absent for 6 months. The patient was, however, well enough to be up and about, and no acute symptoms appeared till Friday, 28th October, two days before her admission to the Infirmary. On Friday afternoon she was seized with moderately severe pain in the right iliac region. Shortly afterwards she was seen by Dr. Hitchcock, the resident medical officer of the Dispensary, who found that she had pain, tenderness and muscular resistance in the right iliac fossa, unattended by sickness and without any febrile

symptoms. He regarded the condition as a mild attack of appendicitis, and directed her to remain in bed. On the following day she was considerably better, and the improvement continued till late on Sunday evening, when she was suddenly seized with very severe pain in the right iliac region, and shortly afterwards collapsed. Dr. Hitchcock saw her again and had her removed without delay to the Infirmary.

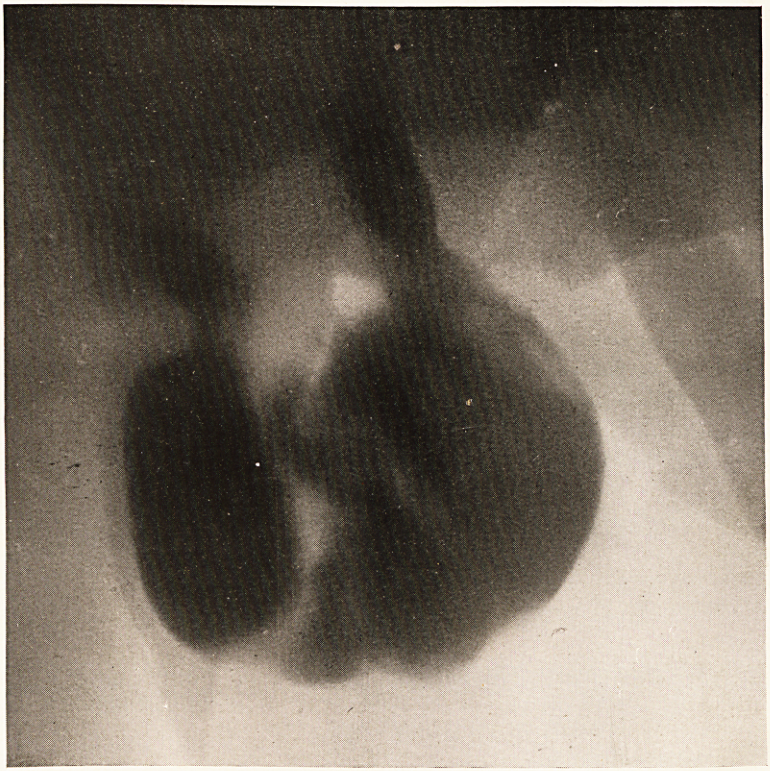
When seen there shortly after admission she was found to be profoundly collapsed. Her skin and mucous membranes were blanched, her breathing was rapid and shallow, her radial pulse imperceptible, and she presented all the features of a case of internal hæmorrhage. The abdomen was not distended, was perfectly lax and free from tenderness. There was some dulness below the umbilicus and in the flanks.

While preparations for operation were being made saline solution was infused into a vein, but no improvement followed. Operation was undertaken in the hope of relieving her condition, but with small prospect of success.

A little ether was given by the open method, and the abdomen opened in the middle line below the umbilicus. The peritoneal cavity was full of fluid and clotted blood. Examination of the Fallopian tubes showed that both were healthy, and after a rapid search a large hæmatoma was found in the mesentery of the small intestine, and blood was seen escaping freely from a tear in the peritoneum towards the root of the mesentery. On enlarging this tear the ruptured sac of a small aneurysm was exposed and torn away, disclosing free hæmorrhage from a branch of the superior mesenteric artery. This was arrested by ligature, though with difficulty, and the abdomen closed. The strain was too much for the patient, and she died shortly after the operation. At the post-mortem examination the patient was found to have had endocarditis, with old and recent vegetations on the mitral and aortic valves. Old infarcts were present in the spleen and kidneys. The bleeding was found to have come from a secondary branch of the superior mesenteric artery just beyond the division of a primary branch.

The sequence of events was apparently as follows:—An embolus from the heart lodged in the artery, softening of the arterial wall followed, and a small aneurysm formed at the spot. This gave way, and blood leaked at first between the layers of the mesentery, giving rise to the mesenteric hæmatoma found at the operation. The peritoneum of the mesentery eventually tore and allowed blood to escape into the peritoneal cavity.

The case is of interest both from the pathological and clinical points of view on account of its rarity. Curiously enough, a few weeks ago the writer met with a case presenting similar clinical features, in which a man aged fifty years suffered for a few days from pain in the epigastrium and down the left flank. The pain began suddenly



Radiogram of Bowel in Hernial Sac.

while he was rising from the stooping position, but not making any special effort. It was so severe as to make him stop work, but improved after some hours, and gradually moderated during the next two days. On the third day, without obvious cause, the pain suddenly became very severe again, and the patient collapsed. He was admitted to Leith Hospital, but his condition was so bad that no operation could be attempted, and he died a few hours later. At the post-mortem examination the peritoneal cavity was found full of blood, and a hæmatoma was found in the gastro-hepatic omentum, from which the blood had escaped into the peritoneal cavity. The hæmorrhage had come apparently from a small aneurysm, but not one caused by embolism, as there was no endocarditis in this case.

The resemblance between the two cases was rather striking. In both illness began with moderate pain of doubtful origin, unattended by febrile symptoms; in both this pain improved decidedly, leading to the supposition that the illness was passing off; and in both sudden exacerbation, followed by collapse, took place, and the patients died in a few hours of hæmorrhage into the peritoneal cavity.

THE DIAGNOSIS OF THE CONTENTS OF A HERNIAL SAC BY X-RAY EXAMINATION.

By GEO. A. PIRIE, M.D.,
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THE diagnosis of disease of the stomach or intestine is frequently made clearer by means of a bismuth meal and the X-rays. It was during the examination of such a case lately that the presence of an inguinal hernia was discovered and this skiagraph was taken. The case is as follows:—D. B., aged 68, was admitted to the Dundee Royal Infirmary complaining of pain in the region of the stomach of eight days' duration. He looked old and thin. A bismuth meal (two ounces of bismuth carbonate in a pint of boiled bread and milk) was given at 10 A.M. The stomach was seen to be fairly normal in shape, but the fundus was three inches below the umbilicus. Peristalsis was feeble. At 4 P.M. a second examination was made. The stomach still contained some bismuth, but much had passed on, and its shadow could be seen in the cæcum. The diagnosis was made of gastric atony with defective emptying due to some obstruction at the pylorus. (At the subsequent operation Mr. Price found malignant disease of the liver. The pylorus was not involved, but was probably pressed upon by the new growth.)

During the X-ray examination a peculiar shadow was noticed in the pelvis. It was darker than usual and extended into the scrotum;