Surgery.

THE DIAGNOSIS OF ABDOMINAL TUMOURS.

BY CHRISTOPHER HEATH, F.R.C.S., ENG.

Several cases of abdominal swellings having passed through my wards during the last few months, I propose to-day to discuss the diagnosis of abdominal tumours, taking for my text the very interesting case of a young woman now upstairs. Briefly, her history is, that she was admitted with a well-marked psoas abscess on the inner side of the right thigh, and with a tumour on both sides of the abdomen, the left being considerably larger than the right. Menstruation having ceased for some little time, it seemed possible that there might be double ovarian disease, for it was quite clear that there was no pregnancy; but we found that we had really to deal with a double psoas abscess only, the tumour on the right side disappearing as the matter drained off, and the left one having a distinct fluctuation beneath Poupart's ligament in the upper part of the thigh, where I propose to introduce the aspirator this afternoon.

The following tumours are common to both sexes.

Ascites, or dropsy of the peritoneum, gives an uniform roundness to the lower part of the belly when the fluid is small in quantity, or a general distension of the abdominal walls if much fluid be present. The skin is tense and shining, and the umbilicus flat or protruding, and the superficial veins enlarged. On palpation, a distinct wave of fluid can be felt from one side to the other; and when the patient is recumbent, the intestines float forward, giving a clearer note on percussion in front than in the loins, where the fluid collects. On turning the patient on his side, the fluid gravitates to the lower part, and a clear percussion-note may be obtained on the higher side, provided the abdomen be not very tense.

In a case of moderate ascites, it will be possible to map out the liver, stomach, and spleen, by careful palpation and percussion; but if a large quantity of fluid be present, this will be impossible until paracentesis has been performed.

A *distended bladder* is in the median line and bulges out the central portion of the abdominal wall. Percussion over it is dull, unless some coils of small intestine should happen to cover it, which is not unfrequently the case, while both flanks are clear when the patient is recumbent. Pressure over the tumour causes pain and a desire to micturate, and the use of a catheter results in its gradual disappearance.

Tympanites, or general distension of the intestines, is not unfrequent in hysterical women, in whom borborygmi, or gurglings, are commonly heard. Extreme tympanites may occur in either sex as the result of intestinal obstruction, in which case the distended coils of small intestine may be felt or seen rolling about beneath the tense abdominal wall. Or it may occur as the result of peritonitis, in which case the intestines are usually fixed. The percussion-note in all cases is tympanitic.

Solid tumours, dull upon percussion, and to be readily mapped out, provided there be no ascites, may be connected with the liver, spleen, intestines, or kidney. A tumour occupying the right hypochondrium, and extending forwards to the middle line or beyond it, and downwards to the pelvis, dull on percussion and solid to the touch, or possibly with a fluctuating spot, will be the liver. The diagnosis will be rendered certain if the edge of the liver with the notch in it can be felt.

A tumour occupying the left hypochondrium, and extending forwards and downwards, dull on percussion, and with a notch in its border, must be the spleen.

A small hard mass, slightly changing its position from time to time, will be either a mass of fæces impacted in the intestine, or a mass of cancer attached to its wall. Impacted fæces are most common in the large intestine, and give a somewhat doughy sensation to the fingers when steadily pressed against the mass. Hard cancer is most frequent at the pylorus and the lower end of the small intestine, close to the cæcum, or in the sigmoid colon, and is perfectly unyielding.

An obscure tumour in the loin can be best examined when the patient is recumbent, one hand being placed beneath the loin, and the other immediately below the false ribs, the ab-