

The tumor extended upwards into the left hypochondriac region and downwards to the left iliac fossa through the left lumbar region; it inclined forwards towards the umbilicus, receding as it did so from the anterior abdominal walls. It could be tilted forwards, without occasioning any pain, by pressure behind over the region of the kidney; in other directions it was quite fixed. Percussion dullness extended to the lower border of the 6th rib outside the nipple line, and posteriorly over the region of the kidney a slight bulging was noticed.

There was no dilation of the superficial veins, and no oedema of the extremities. The urine was examined on two different occasions. The quantity excreted, though not measured, seemed normal. Nothing could be inferred from the sp. gr. or color. It was acid in reaction, and contained neither albumen nor sugar; but, when examined microscopically, blood cells were distinctly visible and urates were present in large quantities.

The disease progressed without any apparent signs of hæmaturia. The patient became more emaciated: there was some increase in the size of the tumor, and the exacerbations of pain towards the end became more frequent and more severe. A slight rise of temperature was noticed, on two occasions, to 100° and 100.3° F.

The last two or three weeks were marked by an uncontrollable diarrhoea. The patient now took to her bed, and from this out, the loss of strength was very rapid, and the emaciation extreme, and she died on the 31st October. Dr. Finlay saw the patient with me at the latter end of her illness, and agreed with the diagnosis.

*Remarks.*—The invasion of the cervical glands of the left side of the neck, the freedom from disease of the other superficial lymphatic glands, is worthy of note. It was this that gave me the first clue to the possibility of malignant disease. I ordered the patient to bed, and made a thorough examination in search of the primary growth. It was only after this was localized that any mention of hæmaturia was made by the patient. In tracing the course of this secondary infection from the primary disease in the kidney, I believe that it was conveyed by the lymphatics of the kidney to the thoracic duct and by this channel to the lymphatic glands of the left side of the neck. I feel more inclined to this opinion after noting, at the post-mortem, the condition of the retro-peritoneal glands in the neighborhood of the kidney.

Hæmaturia had appeared early, had never been profuse, and for the last five months of the illness, was reduced to a mere trace, which required a microscopical examination to determine.

At the post-mortem the transverse colon was

noticed to be uncovered by the great omentum, and extended downwards from the hepatic and splenic flexures to a point below the umbilicus. Although the intestine was at that time quite empty, from the severe diarrhoea that had preceded death, I think now that possibly that portion of the large bowel, which could be so distinctly felt in life, was part of the transverse colon from its mid-point below to the splenic flexure, which in its abnormal position ascended almost vertically in front of the tumor.

Another point which I might mention, though I consider it merely as a coincidence, was the acidity of the saliva. It was tested with strips of litmus paper, placed over the orifices of the ducts. I made four tests at intervals of a few days. Three times the reaction was acid, once neutral.

*Pathological Report.*—The whole growth manifests the ordinary character of a primary medullary carcinoma of the kidney arising from the epithelium of the renal tubules. It shows in places the true glandular form of carcinoma, first described by Waldages, and indicated clearly, from microscopic specimens, how the tumor cells proliferating from the kidney epithelium becomes gradually smaller and like atypical cells of this organ, while the stroma of the cancerous mass takes its origin from the intertubular connective tissue.

The progress of the case has likewise been of interest, inasmuch as its advance by the lymphatics is the more unusual form of primary renal carcinomata, but the growth in the neck is undoubtedly to be regarded as secondary to the kidney affection, metastases having formed through the thoracic duct and by retrograde advance to the lymphatic glands.

Primary cancers of the kidney do not, as a rule, form secondary growths, and when these occur it is usually by the blood stream. Here the vena cava seemed free, but we are by no means certain as to the condition of the lungs, being unable to examine the thorax for metastases.

Only a partial autopsy was permitted, and that of necessity a hasty one. The abdomen was opened, showing a meagre panniculus. The visible coils of intestines were reddened and the transverse colon displaced downwards and to the left. A large mass was found beneath these intestinal loops, occupying the umbilical and left lumbar regions chiefly, and reaching for about one inch to the left of the vertebral column. This was discovered to be the left kidney and adrenal converted into a large tumor, which lay partly twisted on itself, so that the convex border of the kidney lay rather downwards than outwards. The tumor was easily and rapidly removed, *in toto*, there being no dense attachments to any neighboring organs, but merely thin, loose adhesions.

During removal it was observed that some of