

With respect to *method and direction of growth*, the tumour usually spreads forwards, but from its pseudo-cystic character is less readily detected than a solid renal growth. Possibly some retro-peritoneal sarcomata may really arise from adrenal tissue. On the right side an adrenal growth may extend to the right lobe of the liver. The spleen is not often affected, but the pancreas and stomach may be invaded. If it infiltrates the kidney it may spread into the renal vein, and even project into the inferior vena cava. Secondary growths are most frequently met with in the liver. This was so in 14 out of 26 cases, and in addition it was invaded by continuity in 3. The lungs were affected in 6; the pleura in 3; the kidney 3, but in addition was invaded by continuity in 4 other cases; aortic lymphatic glands in 6; and peritoneum in 3. The heart was affected in one case, as also were the cerebrum, cerebellum, bones and skin. The other adrenal was infiltrated with secondary growth in 2 cases.

Adrenal growths have been observed in association with disease or malformation of the corresponding kidney.

The *histological characters* are often difficult of interpretation. Of the 26 collected cases the nature was definitely described in 24; 9 were carcinoma and 15 sarcoma. The sarcomata were as follows:—

Mixed or irregular celled.....	3
Round	2
Small round.....	2
Large "	1
Spindle	1
Small spindle.....	1
Myo-sarcoma.....	1
Sarcoma (no further description).....	4

The authors consider that malignant adrenal growths "are peculiar; and form a special class; they may approach, structurally, either the carcinomata or the sarcomata, and sometimes one and the same tumour may, in different parts, resemble both."

The *clinical features* of these cases present exceptional difficulties. "It does not appear that the complete picture of Addison's disease has been presented by any one case of primary malignant disease of the suprarenal bodies, even when both the organs have been invaded; but some of the symptoms of Addison's disease may occur in primary adrenal new growths." Pigmentation may occur. Vomiting, asthenia, pain in the back may all be present.

In *diagnosis* adrenal growths have to be differentiated