

certainly rather open to discussion, concerns the finding in the centre of the growth of small masses of tissue, which to me look very like unstriped muscle, but which others consider fibrous. If muscular, the fact might speak rather for an adrenal origin than for true lipoma, considering the presence normally of unstriped muscle in the adrenal cortex. It must be confessed that the above considerations are insufficient probably in the present state of our knowledge for a definite diagnosis of hypernephroma; nevertheless I believe that they are valid enough to suggest that diagnosis strongly. What they do very decidedly indicate is the necessity of further study along the lines of fat production in hypernephroma.

B. D. GILLIES, M.D.—I saw three or four of these Grawitz tumours, and one I studied microscopically in Vienna. With regard to the clinical side, I may say that Kolisko was able to demonstrate, from the urine of one or two persons, the presence of a Grawitz tumour from the blood clots where hæmaturia was present. There were endothelial cells round the clots, and he called it an endothelioma or perithelioma. Clinically, he said they might be rapid in their course, moderately rapid, or extremely latent. In the tumour that I examined myself, I may say that macroscopically it was an irregularly shaped kidney with masses of fatty tissue, inside of which there was degenerated tissue, which seemed to be darker in colour, and seemed to me clotted blood, thus accounting for the hæmaturia which was present. Microscopically, the sections showed cells in columns, but in other parts they showed cells in masses, which were extremely large and clear. One would have great difficulty in differentiating them from simple fat cells. The structure is that of an organized tissue, not simply fat tissue. There are certain parts in this tumour under discussion where we have large vessels with thick walls, due apparently to increase in endothelial tissue about the lumen, which makes one think that we have not to do with a simple lipoma; but whether it is an endothelioma that has degenerated or whether we have to do with a hypernephroma I am not able to say. Endothelioma and perithelioma were used indiscriminately in the clinical teaching at Vienna. In tumours of adrenal origin we are especially liable to error, for in microscopic appearance they may little resemble the organ from which they spring.

DR. BELL.—I quite agree with Dr. Adami with regard to the use of this term. If we take the word in its literal meaning or the meaning given to it by Birch Herschfeld, of course we should not call any tumour a hypernephroma if it does not show evidences of having originated in adrenal tissue; but is it always possible to find evidence of this? In this particular tumour I do not think you can exclude the possibility that such evidence may be concealed in the large quantity