388 SURGERY.

there is also quite an extensive circulatoryanastomosis between the peritoneum and the kidney. As a result the peritoneal cavity has to be opened in any operation involving decapsulation of the kidney in the dog.

The changes noted are summed up as follows: First, the capsule of the normal kidney consists of two distinct layers, the outer much thicker, the inner very thin and the direct continuation of the intertubular connective tissue; second, in decapsulatin, the outer layer only is removed, leaving the inner lacerated but adherent to the kidney's surface; third, at first a thin exudate appears on the free surface of the kidney, which, with the remains of the inner layer, gradually becomes a fibrous investment, resembling microscopically the normal capsule, in that it strips readily, and with the passage of time becomes firm.

Fourth, microscopical examination reveals the fact that it is in some cases thicker and in others thinner than the original; the former generally being true, and that in most cases it varies greatly in thickness in the same specimen.

Fifth, the structure, at least up to three and a half months, does not become differentiated into layers, but is one homogeneous mass of fibrous tissue.

Sixth that this fibrous tissue will form under adhesions and is to be recognized as distinct from them both macroscopically and microscopically.

Seventh, there is sometimes an infiltration with round-cells and a proliferation of the intertubular connective tissue of the cortex, without, however, affecting the glomeruli.

Eighth, in no case was there any considerable anastomosis between the renal and the perirenal blood channels. In one case, at the same time decapsulation of one kidney was performed, the renal artery of the other was ligated. This would presumably call for increased activity in the circulation of the decapsulated kidney. It was all, however, made up by the increased size of the renal artery and vein, and not through a peripheral anastomosis.

In his concluding remarks the writer points out the difficulties of drawing inferences as to the value of decapsulation as a curative or palliative measure in chronic glomerulonephritis, the chief one being that so far it has been found impossible to produce this condition in dogs. With reference to theories advanced to explain the causes of the benefits obtained in these cases, this research would seem to support the view advanced by Israel and Pousson, that they are due to relief of tension, and not to the establishment of a collateral circulation, as advanced by Edebohls.

W. L. B.