

Kidney Program Transcript

The kidney lies in the upper posterior aspect of the abdominal cavity. It is protected, somewhat, by the ribs and by the quadratus lumborum muscle but, also, by a very heavy renal fat pad. In the drawing on your left, is a longitudinal section through the kidney showing the cortex, the renal pyramids, and the medulla. You can see that in the cortex we have these pyramids that come down into small papilla and then lie in to a funnel.

These small funnels are known as the minor calices, and several minor calices that come together form a major calyx. The major calices then go into the renal pelvis, which is continuous with the ureter, which takes the fluids down into the bladder.

On the right, is a diagrammatic drawing of the uriniferous tubule. The uriniferous tubule has two parts. There is the nephron, which is made up of the glomerulus, which is a capillary bed. And that glomerulus is surrounded by a capsule known as Bowman's capsule. Fluids from the glomerulus are picked up by Bowman's capsule and passed through a series of tubules.

The first tubule is the proximal convoluted tubule, which goes to the Henle loop and then to the distal convoluted tubule. That makes up the nephron. The distal convoluted tubule then empties into the collecting tube. So the uriniferous tubule consists of two parts, the nephron and the collecting tube.