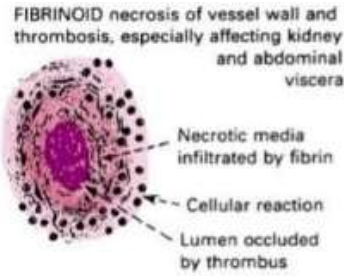
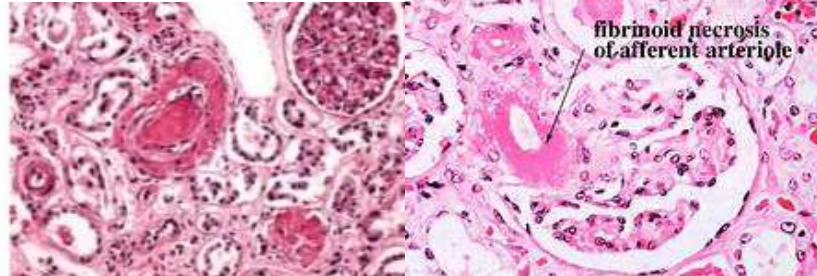
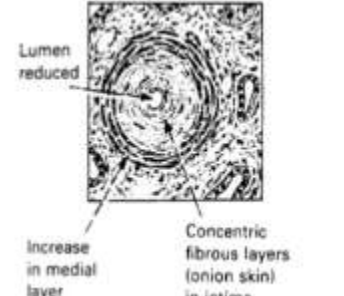
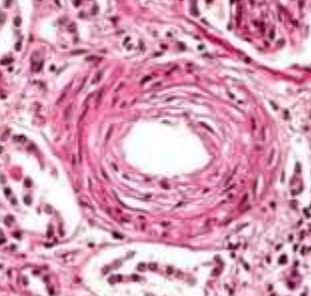
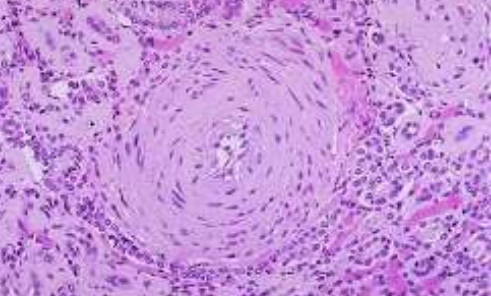


**XIX. Diseases of the Urinary System**

<b>Malignant Nephrosclerosis (malignant hypertensive kidney)</b>			
<b>Kidney:</b>	<b>Size:</b>	<ul style="list-style-type: none"> <li>• Normal (or slightly enlarged)</li> </ul>	<b>IV-1.292</b>
	<b>Capsule:</b>	<ul style="list-style-type: none"> <li>• Strips off rather easily</li> </ul>	
	<b>Subcapsular surface:</b>	<ul style="list-style-type: none"> <li>• Smooth (or finely granular)</li> </ul>	
		<b>Shows haemorrhages:</b> <ul style="list-style-type: none"> <li>• At cortex</li> <li>• Subcapsular</li> <li>• Numerous</li> <li>• Patchy (some)</li> <li>• Minute (some)</li> </ul>	
	<b>Consistence:</b>	<ul style="list-style-type: none"> <li>• Rather firm</li> </ul>	
	<b>Cut surface:</b>	<ul style="list-style-type: none"> <li>• Not shrunken</li> </ul>	
	<b>Cortex:</b>	<ul style="list-style-type: none"> <li>• Normal thickness</li> <li>• Preserved pattern</li> <li>• Few Petechiae of vascular congestion</li> </ul>	
	<b>Medulla:</b>	<ul style="list-style-type: none"> <li>• Well-preserved</li> <li>• Differentiated from cortex</li> </ul>	
	<b>Renal-artery-branches:</b>	<ul style="list-style-type: none"> <li>• Thickened</li> <li>• Slightly prominent</li> </ul>	
	<b>Renal pelvis (and calyces):</b>	Normal	
			
			

**N.B.:**

- This is an example of the kidney of **malignant hypertension**.
- This condition is characterized by **acute & progressive renal insufficiency at an early date**.
- The kidneys are normal in size (or are increased); and the gross changes may be very slight.
- **The two kidneys may differ in size** (and, one of them may be slightly contracted).
- The surface of the kidney is usually smooth (**no time for atrophy or scarring**).
- If, as happens occasionally, its surface is granular, it may mean a malignant phase of hypertension on top of a benign one or other underlying chronic diseases of kidney.
- The surface is **covered with haemorrhages which are usually large and blotchy** but sometimes are small and petechial (and, **must be differentiated from the flea-bitten kidney of subacute bacterial endocarditis**).
- It usually occurs at a younger age than that of benign hypertension; and, the blood pressure is also higher.
- Fortunately, it accounts for a low percentage of all hypertensives (4-8%).
- Clinically, there are **nausea, vomiting, headache and hypertensive retinopathy with visual impairment**.
- Death is usually due to **uraemia** (or even before its onset); the renal vessels (rather than the arterioles and small arteries of various other organs in the body such as the adrenal glands, pancreas, gall bladder, intestines, retina etc... ) are particularly more affected (→ hyperplastic arteriolosclerosis and necrotizing arteriolitis).
- Occasionally, however, the patient may die of an intercurrent infection (unrelated to the renal disease or the hypertensive state), cardiac failure or cerebral haemorrhage.

