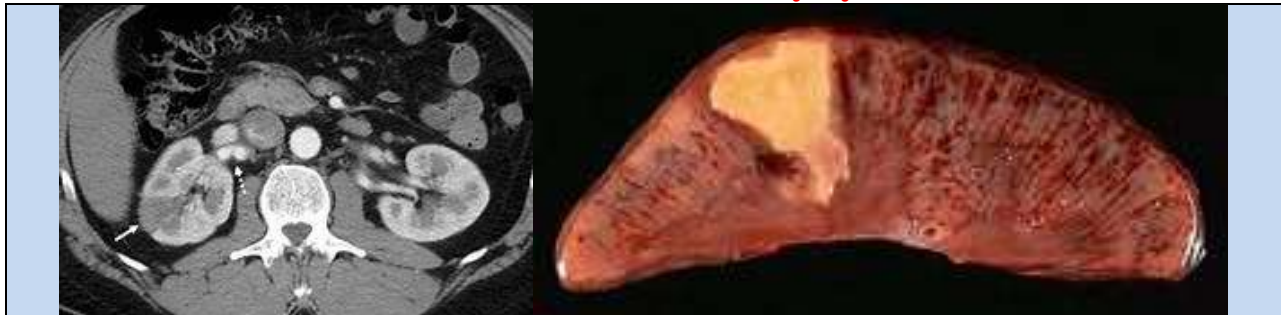
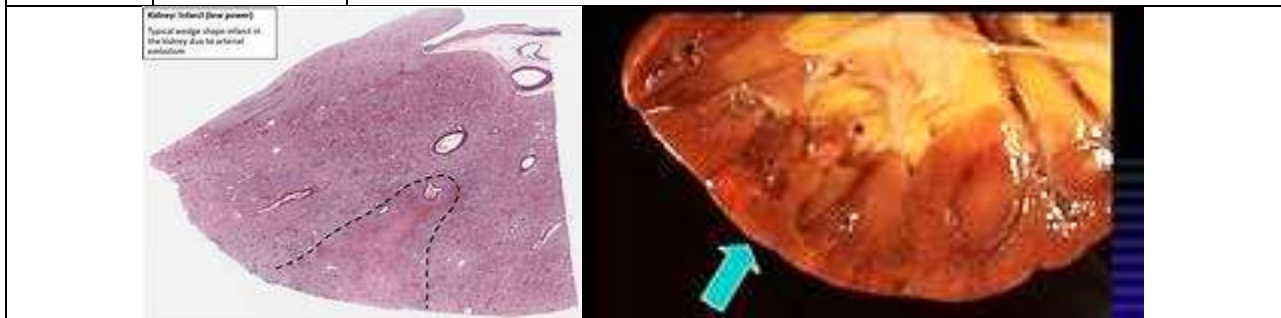


XIX. Diseases of the Urinary System



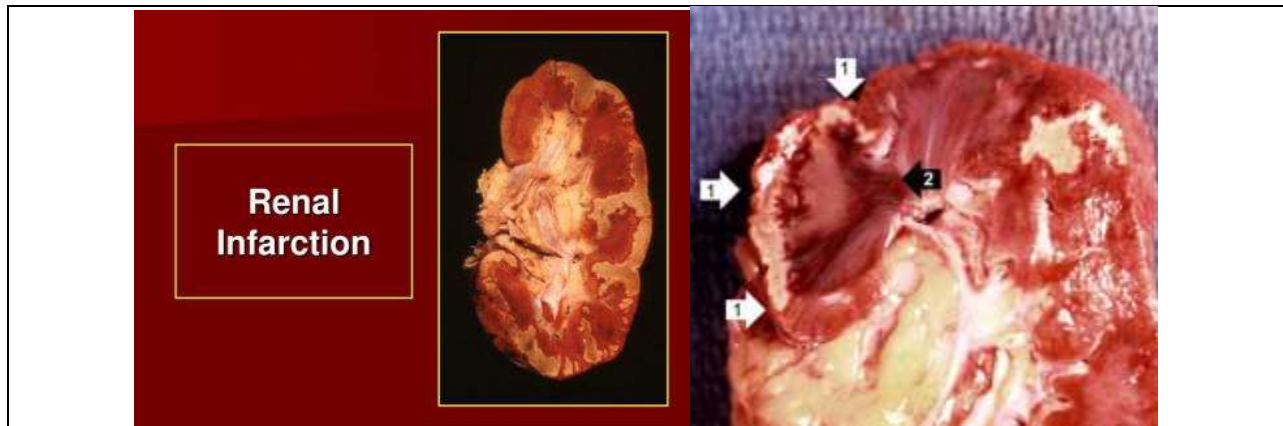
Recent Infarct IV- 1. 111

Kidney:	Size:	<ul style="list-style-type: none"> • Slightly increased
	Subcapsular surface:	<ul style="list-style-type: none"> • Shows white patches
	Cut surface:	<ul style="list-style-type: none"> • Patches extend into kidney • Appearances are those of infarcts
	Infarcts:	<ul style="list-style-type: none"> • Multiple • Small (and variable in size) • Pyramidal; • wedge-shaped (or irregularly-rectangular) • Base is at subcapsular surface • Apex is directed towards the renal pelvis • Pale opaque in appearance • Yellowish-white • Well-demarcated and confined to the cortex • Surrounded by a dark red zone (hyperaemia) • Firm in consistence



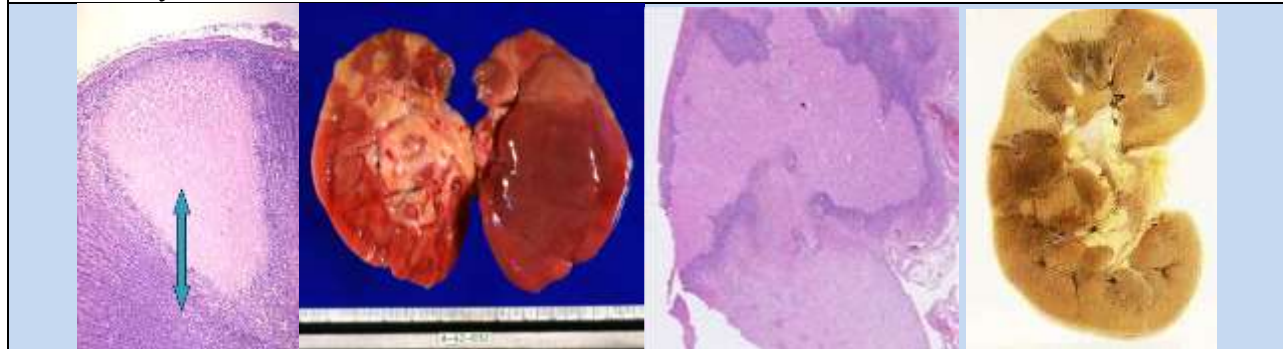
N.B.:

- Infarcts in the kidney are at first **haemorrhagic** then they become pale and anemic.
- This is in contradistinction to those in the lung which remain haemorrhagic.
- The reason is "the end artery blood supply to kidney.
- In case of infarcts of the kidneys, there may exist a thin rim of uninvolved renal tissue separating the infarct from the overlying capsule (and hence, the patient may not feel — or complain - of pain); but, the urine may show blood (early).
- However, there are pain and tenderness in most cases.



Sources of emboli producing kidney-infarcts:

1. Detachment of thrombi from left side of heart → embolism as in:
 - (a) Heart failure (mural thrombi in: Atrial appendages; over an infarct at left ventricle).
 - (b) Subacute bacterial endocarditis and aortic aneurism.
2. Thrombosis over atheromatous renal arteries (and very rarely by renal thrombophlebitis).
3. Polyarteritis nodosa.

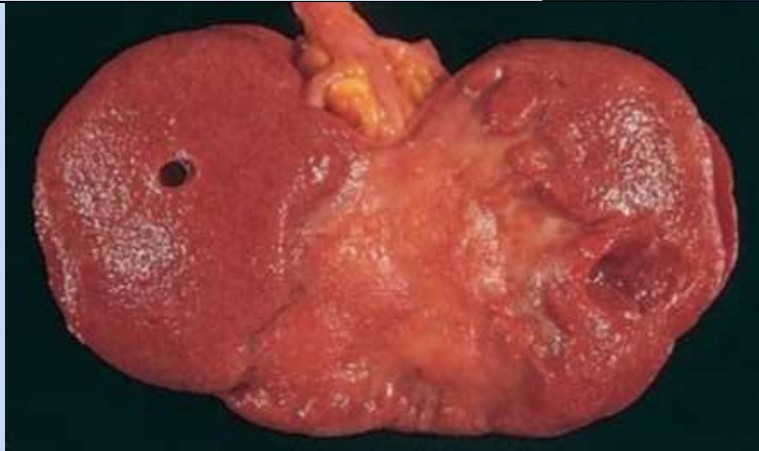


Infarct (old) IV-1.112.

Kidney	Size:	<ul style="list-style-type: none"> • Slightly decreased • Shows an infarct
	The infarct:	<ul style="list-style-type: none"> • Is in a healed state • Appears as a wedge-shaped scar • With a depressed base • A fibrosed apex • Shrunken tissue • Is enclosed by a band which is: • Narrow, grey and fibrous
	Capsule over infarct:	<ul style="list-style-type: none"> • Adherent
	External surface over infarct:	<ul style="list-style-type: none"> • Depressed (scarred fibroid atrophy)

N.B.:

- **Histologically**, it proved to be a healed infarct of the kidney.
- The areas of scarring have to be differentiated from those of **focal healed pyelonephritis**.
*Recurrent embolic attacks may show infarcts of varying stages in the same kidney, Oliguria (from associated sympathetic affection of the unaffected kidney → suppression of urine) may occasionally occur in cases with massive infarcts.



Scarring

Kidney:	Size:	Is diminished
	Surface:	Fibroid scars Remnants of foetal lobulations are still persisting

N.B.: *These scars may be due to:*

1. *Healed infarcts.*
2. *Ischaemic atrophy.*
3. *Effect of atheroma of renal-artery-branches.*
4. *Healed chronic pyelonephritis.*