

HM/CH-1/L-5

**MORPHOLOGY OF
CELL INJURY**

MORPHOLOGIC FORMS OF CELL INJURY

MECHANISMS

1. Reversible cell injury
2. Irreversible cell injury
3. Programmed cell death
4. Residual effects
5. Deranged cell metabolism
6. After-effects

NOMENCLATURE

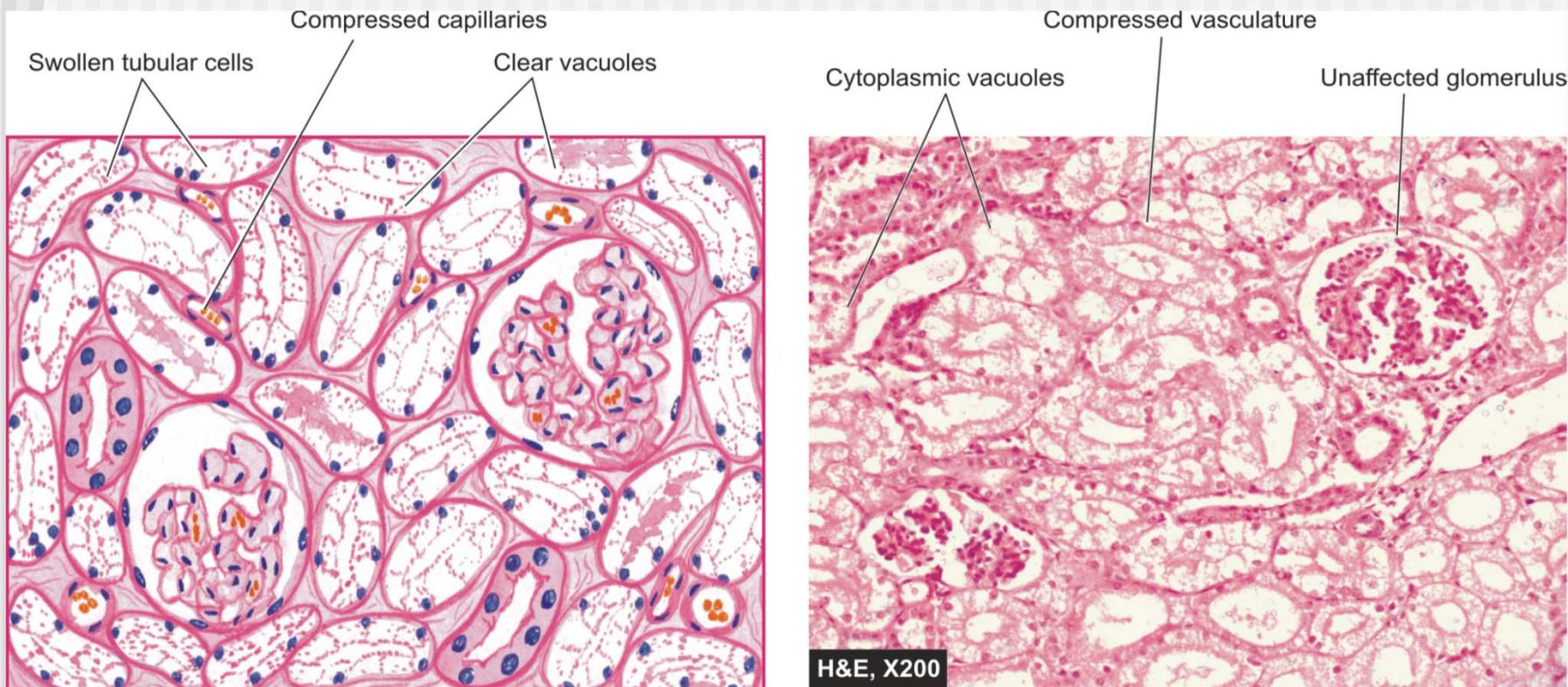
1. Retrogressive changes(degenerations)
2. Cell death-necrosis
3. Apoptosis
4. Subcellular alterations
5. Intracellular accumulations
6. Gangrene, pathologic calcification

Retrogressive changes (degenerations)

- Hydropic change (cloudy swelling, vacuolar degeneration)
- Hyaline change
- Mucoid change
- Fatty change

Hydropic change

- Etiology and pathogenesis
- Morphology: GA, M/E



Hyaline change

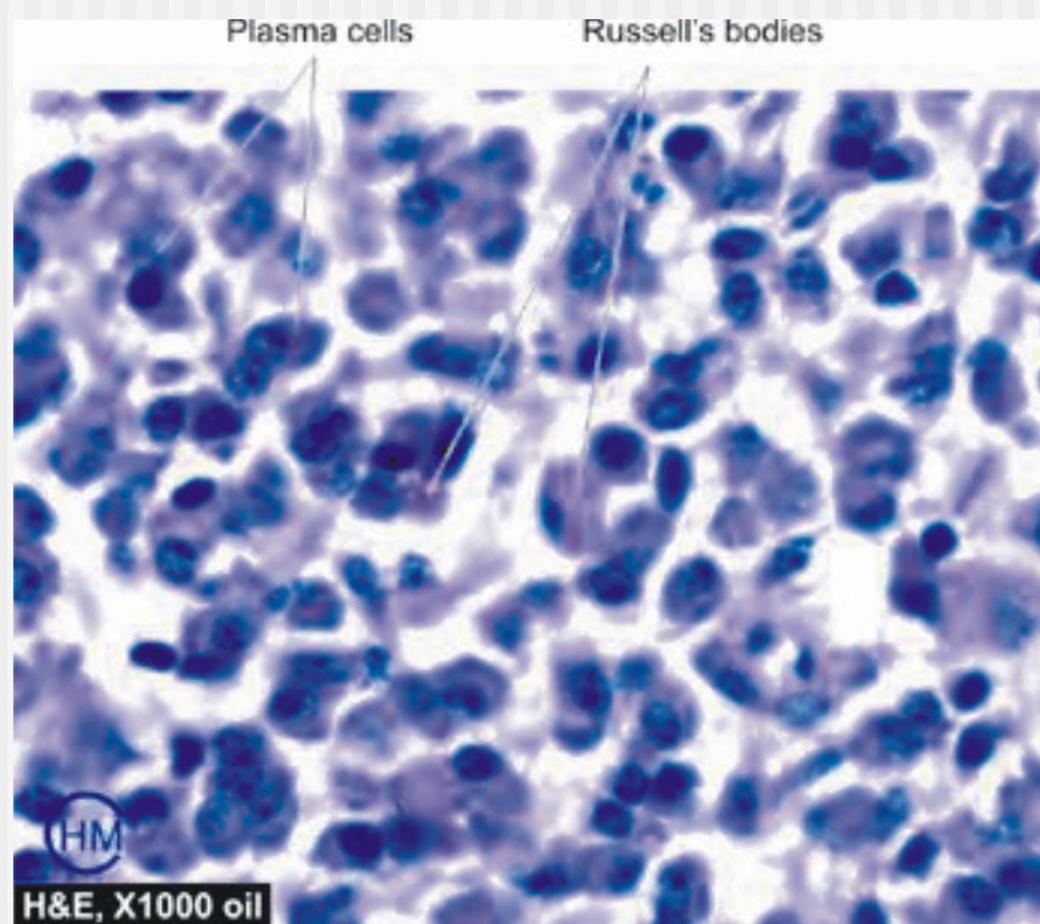
Intracellular hyaline (Epithelial)

1. Hyaline droplets in tubular cells
2. Zenker's degen.
3. Mallory's hyaline
4. Viral inclusions
5. Russell's bodies

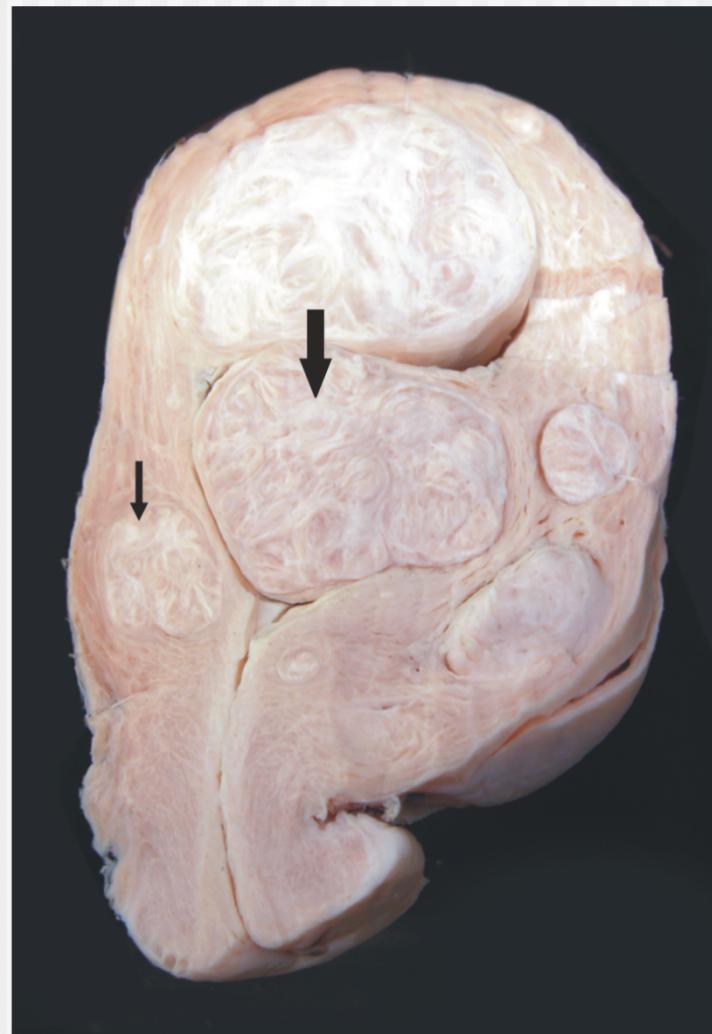
Extracellular hyaline (Mesenchymal)

1. Benign tumours
2. Old scars
3. Arteriolosclerosis
4. Ch GN
5. Corpora amylacea

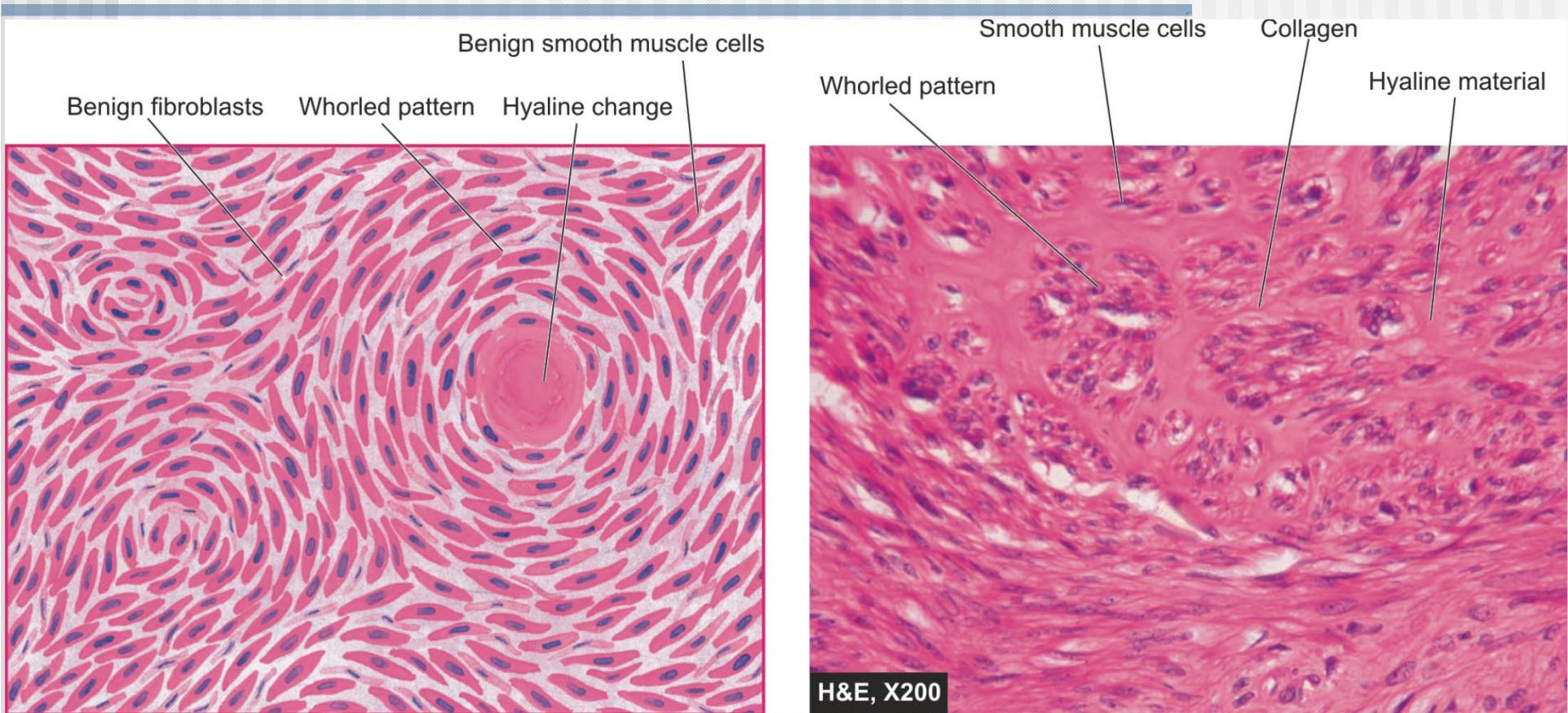
Intracellular hyaline: Russell's bodies



Extracellular hyaline: Leiomyoma (hyaline change)



Extracellular hyaline: Hyaline change leiomyoma



Mucoid change

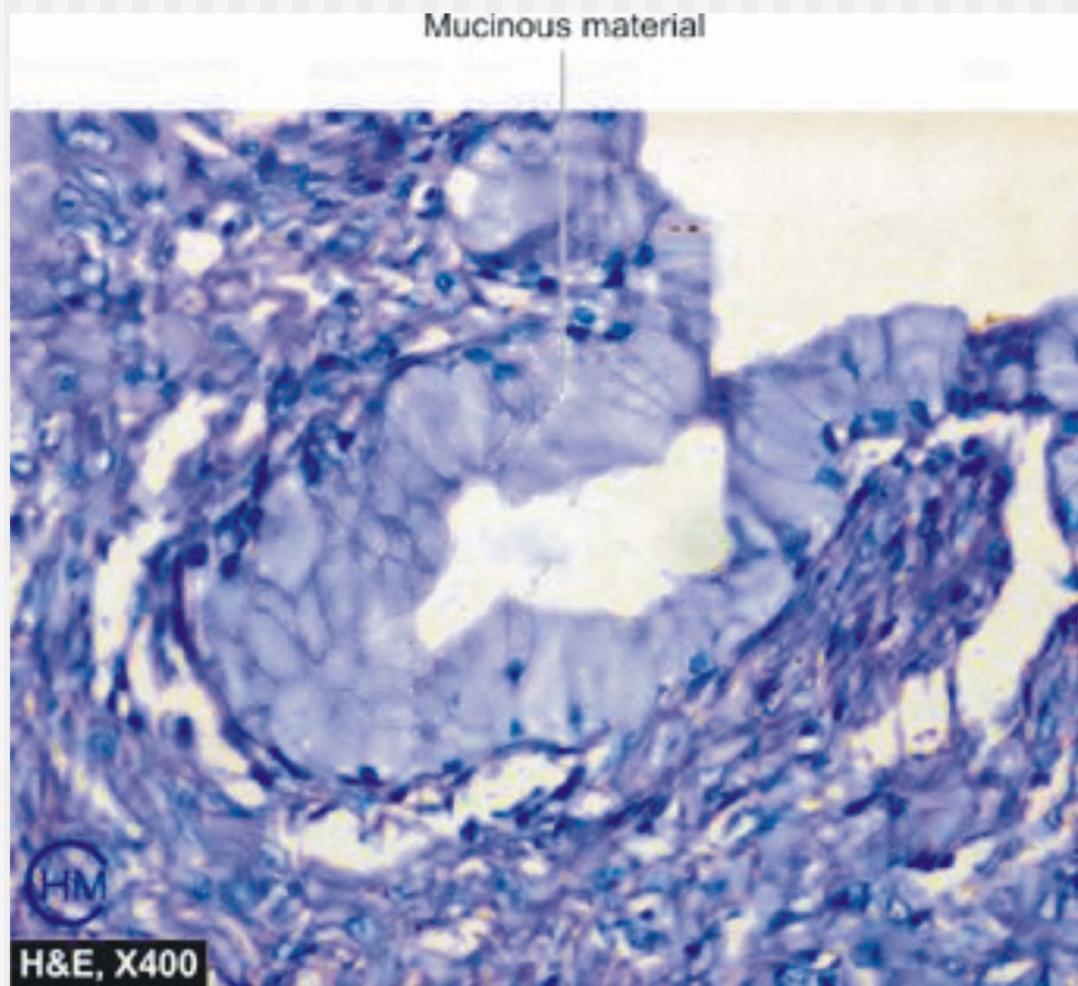
Epithelial mucin

1. Catarrhal inflammation
2. Obstructed duct
3. Cystic fibrosis
4. Mucinous tumours

Connective tissue mucin

1. Mesenchymal tumours
2. Dissecting aneurysm
3. Myxoedema
4. Ganglion

Epithelial mucin: Mucinous cystadenoma ovary



Connective tissue mucin: Neurilemmoma(L), Ganglion (R)

