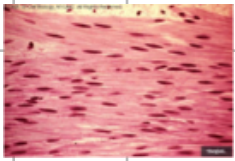
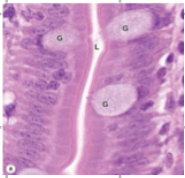


Staining

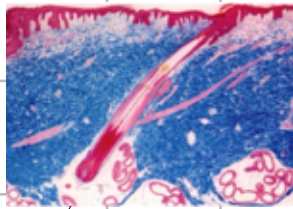
H & E

- basophilic
nucleus
blueish-purple
- acidophilic
cytoplasm
pink
- the most commonly used
- they bind to ionizable molecules in cells



Trichrome

- distinctions among various extracellular tissue components
- (for connective tissue)



Three color

- 1 connective tissue blue
- 2 cytoplasm pink
- 3 nuclei dark brown

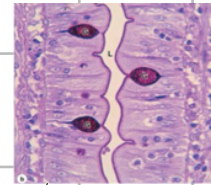
Metal impregnation

- using solution of silver
- for fiber / specific cellular in nervous tissue

(PAS)

The periodic acid-Schiff

- polysaccharide
- carbohydrate-rich



more details than H & E

Sudan black

- lipid soluble
- we should not use
→ heat
→ organic solvents

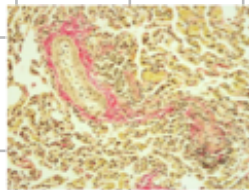
Immunostaining

immunofluorescence

immunohistochemistry

- Antigen - Antibody specific

Van Gieson



collagen pink
muscle yellow

Toluidine blue

- distinguish the myelinated parts of the nerve
→ cannot be clearly seen with H & E
- basophilic

Alcian blue

- basophilic
- for mucin (or mucus)
→ protein in glands and epithelial tissue
→ H & E does not highlight them

by Zeina Salamah

Note: هذه التنيق موبالملايه لكن الدكتور ذكروا