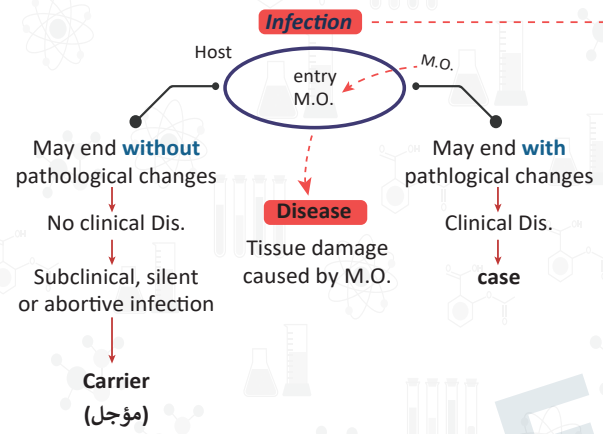
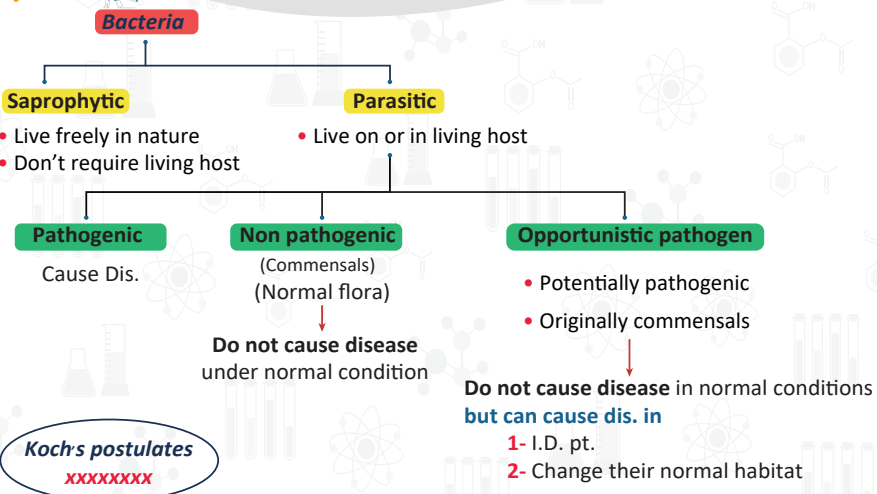
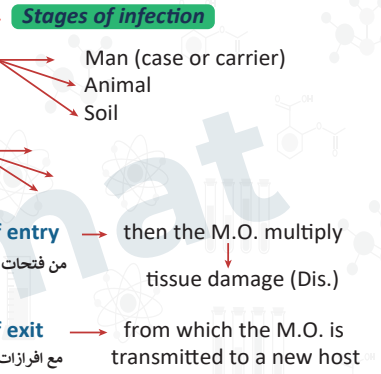


Chapter 9 : Bact. Pathogenesis



Outcome of bact. inf. depends on

- 1) Microbial virulence
- 2) Host immunity



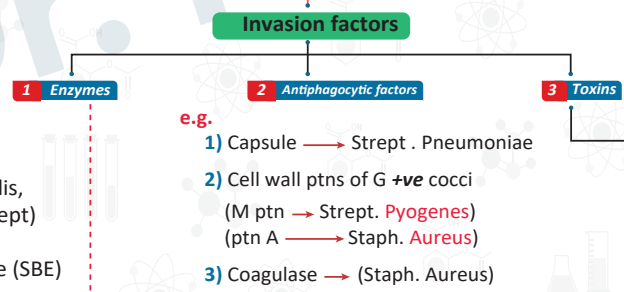
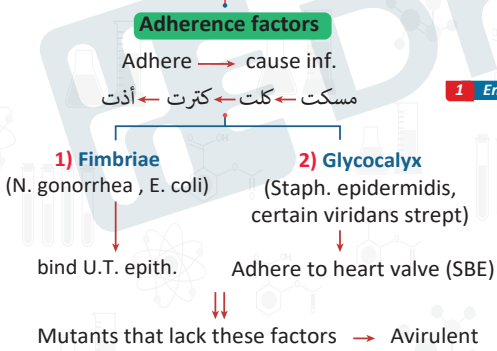
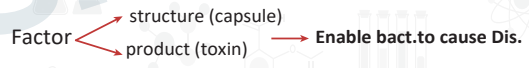
pathogenicity

- Ability to cause Dis.
- Qualitative term

Virulence

- Degree of pathogenicity
- Quantitative Term

Virulence factors



- 1) IgA protease
- 2) lecithinase
- 3) DNase
- 4) Collagenase, Hyaluronidase → spreading factors
- 5) Leukocidin → kill WBCs

Exotoxin	Endotoxin
Living G+ve → exotoxin → protein	Integral part of cell wall of G -ve bact. → released only with cell lysis مايطلعش منها إلا بطلوع روح → LPS (lipid A)
Highly toxic → highly Ag	Weakly toxic → poorly Ag
Heat labile → unstable at temp > 60°C	Heat stable above 60°C for several hours
Specific action	Non specific → all cause fever and shock
gene → Plasmid → C.I. Tetani Phage → C. diphtherie PAI → H.pylori Chr. → B. pertussis	gene → chr. → E. Coli, meningococci
Can be converted to toxoid	Can't



General Micro (8)

