

Inflammation

Extravasation phases ③

1 Recognition :- 1) **PAMP** associated with 1) Cell stress 2) microbial pathogens ⑤ : الإصابة بمرض أو إصابة
 by PRR ③ 2) **DAMP** from Death-Damage cell

2 Mast Cells → Histamine
 Bradykinin

Vasodilator → Swelling - heat - Redness
 ↑ Vascular permeability
 pain - Loss of function

3 Local macrophage → Cytokines IL1
 (Cytokines IL8)
 + Complement (plasma proteins) by phospholipids + peptides of bacteria →

① function
 Expression selectin type of adhesion on Endothelium of blood cells
 Stimulate phagocytes (Neutrophils) (leucocytes) to go to site of infection

4 (1) Neutrophils تذهب إلى موقع الإصابة (تولد في نخاع العظم هناك)
 E-selectin bind with Mucin like-CAM (2)

Rolling → by weak bond
 = lead to attachment-deattachment
 Capture because of blood flow

Chemotaxis

② function
 ⑤ Chemokines released in area of infection :- IL8 - C5a - N-formyl peptide - LTB4
 bind to its receptor in neutrophils

→ Conformational change in integrin molecule
 Increase affinity to bind
 immunoglobulin-superfamily adhesion molecule with Integrin
 endothelium CAM Neutrophil
 → Flatten innate cell
 → Strong bond
 → Arrest + Adhesion

6 Transendothelial migration
 phagocyte extend through vessel wall - extravasates
 ⑦ phagocytosis

