

# Patho Unit5 Immune Disease Cheat Sheet by damn via cheatography.com/195477/cs/41590/

Immunity		
Cell-mediated	Humoral	
4H8C	B lymphocyte bind Ag -> Plasma cell -> Ab	
Type I (Immediate hypersensitivity/ Allergy)		
- IgE mediated		- Systemic anaphylactic rxn
1st exposure		
Bind Ab to mast cell		
2nd exposure		
Immediate		Late phase
Sensitized mast cell bind Ag		recruit eosinophils
2. Granulation + release mediators		same symptoms, last longer
Clinical features		
H&L: Edema, Mucus Secretion, Sm spasm		Eosinophil damage epithelial cell, activate mast cell
		Recruited cell amplify& sustain response w/ additional exposure
Mediators		
Primary		Lipid
Vasoactive amines     (Histamine)		1. Leukotrients
2. Enzymes		2. Prostaglandin D2
3. Proteogycans		3. Platlet-activiating factor
Cytokines		> TNF,IL-1,Chemokines

# Acquired Immunodeficiency syndrome

- Opportunistic infection from HIV (intravenous injection)
- Bind & kill CD4+
- HIV infect CD4+ helper T lymphocytes, Dendritic cell& macrophages

#### Hallmark

- Loss of 1.Cell-mediated & 2. Humoral immunity

### Type 2 (Antibody-mediated)

- Incompatible blood transfusion

Cell destruction by

- 1. Opsonisation& Phagocytosis
- 2. Inflammation
- 3. Cellular dysfunction

# Type 3 (Immune complex-mediated)

- Deposition of insoluble Ag-Ab complexes

Phase I: Formation of blood-borne complex

II: Deposition in tissues& Activate complement

III: Attract leukocytes& Vessel+Tissue injury

# Type4 (T cell-mediated)

#### Direct CD8+

Attack all infected cell w./ recognised Ag

#### Delayed CD4+

Activated T cell release damaging cytokines

### Autoimmunity (Systemic Lupus Erythematosus)

Ag: Self cells e.g. Nucleus

Ab: Autoantibodies

- ANA, Antipospholipid, Anticytoplasmic

Clinical expression

# Rejection of tissue transplants

- After allocrafts
- Immune system react w./ foreign MHC -> reject& destroy
- Cell-mediated hypersensitivity & Humoral response
- Inflammation, necrosis & organ destruction



By damn

cheatography.com/damn/

Published 8th December, 2023. Last updated 8th December, 2023. Page 1 of 1. Sponsored by Readable.com

Measure your website readability!

https://readable.com