

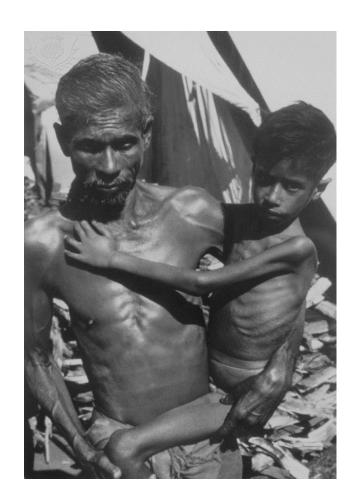
Immunodeficiency Disorders

University of Jordan
School of Medicine
Department of Pathology, Microbiology and Forensic Medicine

Malik Sallam, MD, PhD

Immunodeficiency (ID)









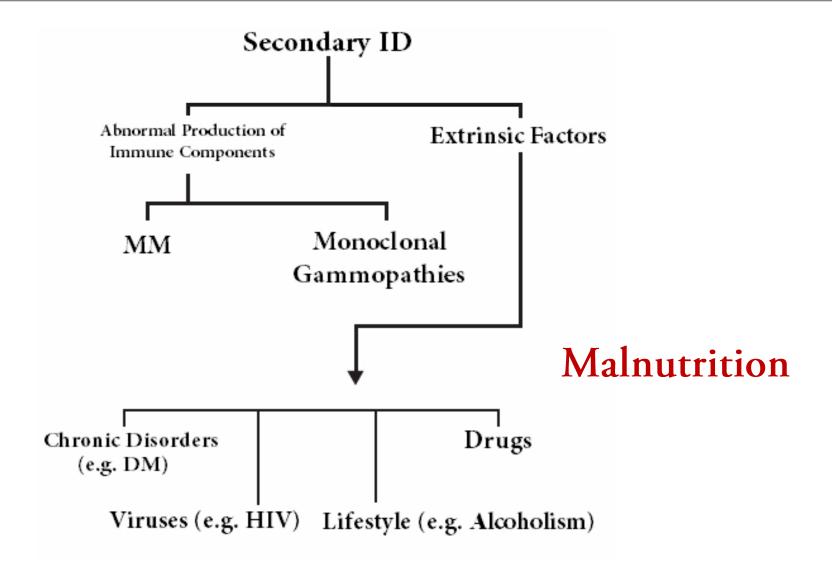
Immunodeficiency (ID)

^		
die	معة الأره	الجار
	ويفلي كو الكتاب والدكمة	
	יאזוב זרפור	
_ `		

Type of infections associated with major categories of PIDs					
Organism	Antibody deficiencies	CIDs	Phagocytic defects	Complement deficiencies	
Viruses	Enteroviruses	All, especially: CMV, respiratory syncytial virus, EBV, parainfluenza type 3	No	No	
Bacteria	Streptococcus pneumoniae, Haemophilus influenzae, Moraxella catarrhalis, Pseudomonas aeruginosa, Staphylococcus aureus, Neisseria meningitidis, Mycoplasma pneumoniae	As for antibody deficiencies, also: Salmonella typhi, Listeria monocytogenes, enteric flora	S aureus, P aeruginosa, Nocardia asteroides, S typhi	As for antibody deficiencies: especially <i>N meningitidis</i> in deficiency of late components	
Mycobacteria		Nontuberculous, including BCG	Nontuberculous, including BCG	No	
Fungi	No	Candida species, Aspergillus species, Cryptococcus neoformans, Histoplasmosis capsulatum	Candida species, Aspergillus species	No	
Protozoa	Giardia lamblia	Pneumocystis jiroveci, Toxoplasma gondii, Cryptosporidium parvum	No	No	

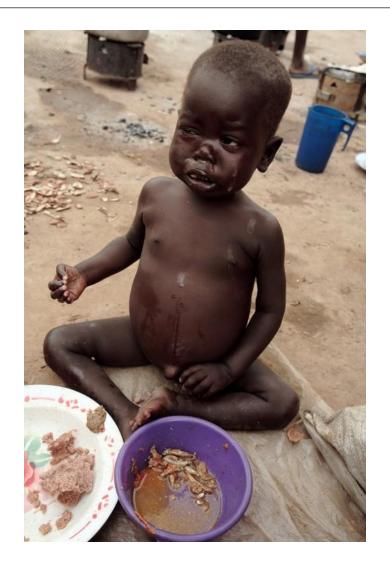
Overview of the Secondary ID





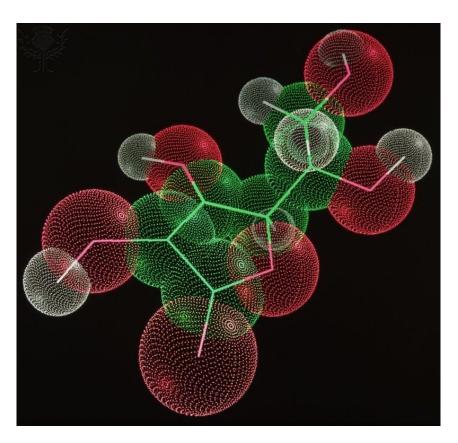
Secondary ID - Malnutrition



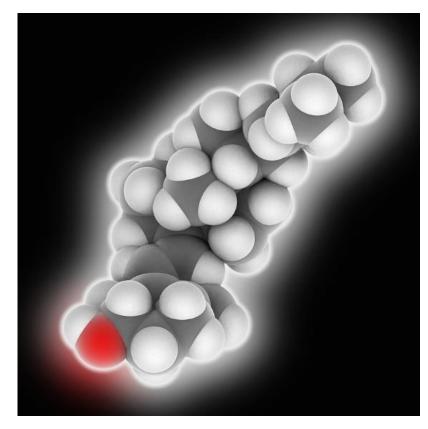


Secondary ID - Malnutrition









Secondary ID – Extremes of Age



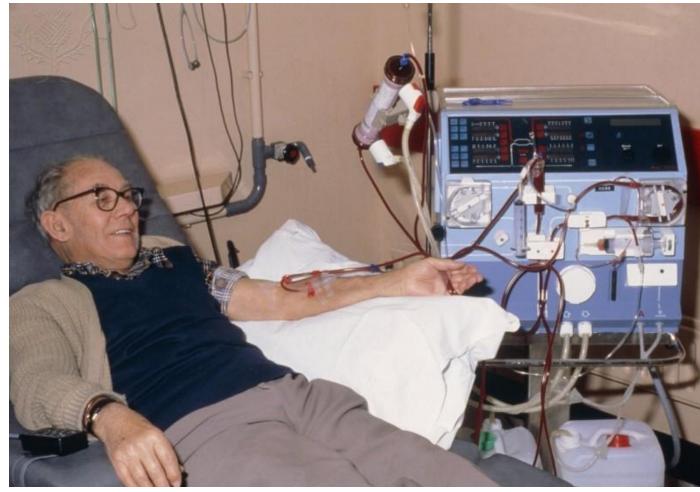




Secondary ID – Metabolic Disorders







Secondary ID – Drugs



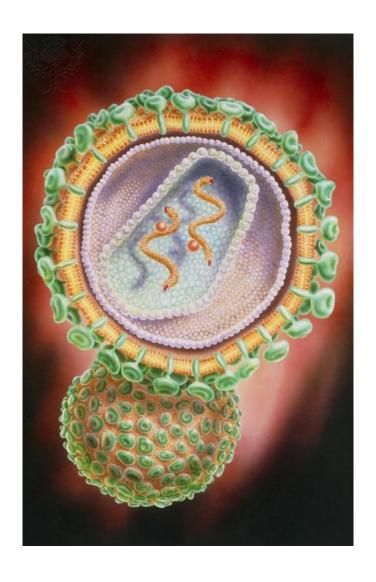






Secondary ID – Infectious diseases





Secondary ID





References

- Abbas AK, Pillai S, Lichtman AH. Cellular and molecular immunology. 9th ed. Philadelphia: Elsevier/Saunders; 2018.
- Levinson W. *Review of medical microbiology and immunology*. 13th ed. New York: McGraw-Hill Medical; 2014.
- Owen JA, Punt J, Stranford SA, Jones PP, Kuby J. *Kuby immunology*. 7th ed. New York: W.H. Freeman; 2013.
- Doan T, Melvold R, Viselli S, Waltenbaugh C. *Immunology*. 1st ed. Baltimore, MD: Lippincott Williams & Wilkins; 2008.
- Nairn R, Helbert M. *Immunology for medical students*. 2nd ed. Philadelphia: Mosby; 2007.
- Male D, Brostoff J, Roth DB, Roitt I. *Immunology*. 7th ed. Mosby/Elsevier; 2006.
- Notarangelo LD. Primary immunodeficiencies. *J Allergy Clin Immunol* 2010,**125**:S182-194.
- Chinen J, Shearer WT. Secondary immunodeficiencies, including HIV infection. *J Allergy Clin Immunol* 2010,**125**:S195-203.
- Modell V, Knaus M, Modell F, Roifman C, Orange J, Notarangelo LD. Global overview of primary immunodeficiencies: a report from Jeffrey Modell Centers worldwide focused on diagnosis, treatment, and discovery. *Immunol Res* 2014,60:132-144.