

IV. ALTERATIONS IN BODY FLUIDS & ELECTROLYTES

IV.A. BODY FLUIDS & THEIR DYSFUNCTION

	Page
A.a. PHYSIOLOGY OF BODY FLUID VOLUMES, COMPOSITION & DISTRIBUTION	IVA-1
A.a.A. GENERAL	
Path IVA-1. General Homeostasis of Body Fluid Volumes & Composition	
A.a.B. DISTRIBUTION	
Critical Table IVA-1. Body Fluid~Water Compartments	
Critical Table IVA-2. Distribution of Water in the Three Most Important Compartments	
A.a.C. ELECTROCHEMICAL PROPERTIES	
A.a.D. OSMOSIS	IVA-2
A.b. ALTERATIONS IN TOTAL FLUID VOLUME	
A.b.A. NORMAL GAINS	
A.b.A.a. METABOLIC WATER	
A.b.A.b. NORMAL MECHANISMS	
Critical Path IVA-1a. Homeostatic Mechanisms Controlling Blood Water	
A.b.A.c. THIRST	
Critical Path IVA-2. Important Mechanisms for Stimulation of Thirst	
A.b.A.d. URINE CONCENTRATING MECHANISM	IVA-3
Figure IVA-1. Centers of the Hypothalamus & Pituitary Gland Involved in Water Balance	
Critical Path IVA-3. The Normal Action of ADH	
A.b.A.d. RENIN-ANGIOTENSIN-ALDOSTERONE-Na^+-H_2O AXIS~SYSTEM	
Critical Path IVA-4. The Impact of the Renin-Angiotensin-Aldosterone Axis on Blood Volume	
A.b.B. PATHOPHYSIOLOGICAL FLUID GAINS	
A.b.B.a. FLUID vs WATER VOLUME EXCESS	
Path IVA-5. General Pathophysiology of Volume Excess	
A.b.C. NORMAL LOSSES - ATRIAL NATRIURETIC PEPTIDE (ANP)	IVA-4
Path IVA-6. Normal Physiology of Atrial Natriuretic Peptide	
A.b.D. PATHOPHYSIOLOGICAL FLUID LOSSES - FLUID VOLUME DEPLETION~DEFICITS (FVD)	
Path IVA-7. General Etiology of FVD	
Path IVA-8. General Etiology of Third Space Fluid Loss	
A.b.D.a. DEHYDRATION	
Critical Path IVA-9. Manifestations of FVD (DEHYDRATION)	
A.c. ALTERATIONS IN INTERSTITIAL FLUID VOLUME & EDEMA	IVA-5
A.c.A. FUNCTION	
A.c.B. REGULATION OF INTERSTITIAL FLUID VOLUME	
A.c.B.a. INTERSTITIAL FLUID (TRANSUDATE) FORMATION (IFF)	
A.c.B.b. INTERSTITIAL FLUID REMOVAL (IFR) (i.e. LYMPH)	
Figure IVA-3. Mechanisms of Interstitial Fluid Removal (IFR) (Lymph Formation)	
A.c.B.c. EDEMA	
A.c.B.c.(A.) ETIOLOGIC FACTORS	
Critical Figure IVA-2. The Four Factors (Starling's Forces) That Influence Interstitial Fluid (Transudate) Formation	IVA-6
Table IVA-3. Causes of Edema	IVA-7
A.c.B.c.(B.) MANIFESTATIONS	
Critical Path IVA-10. The Manifestations of Edema	