

Table of Contents

Part I: Etiology and Pathogenesis

1	Emergence and Etiology of AIDS	3
1.1	Origin of Acquired Immunodeficiency Syndrome	3
	<i>Myron E. Essex</i>	
1.2	Human Immunodeficiency Virus-Related Infections in Animal Model Systems	15
	<i>Jonathan S. Allan</i>	
2	The Life Cycle of Human Immunodeficiency Virus Type 1	29
	<i>Thomas M. Folks and Clyde E. Hart</i>	
3	The Molecular Biology of Human Immunodeficiency Virus Type 1 regulatory genes of HIV)	45
	<i>George N. Pavlakis</i>	
4	Immunopathogenesis of Human Immunodeficiency Virus Infection	75
	<i>Guiseppe Pantaleo, Oren Cohen, Cecilia Graziosi, Mauro Vaccarezza, Stephania Paolucci, James F. Demarest, and Anthony S. Fauci</i>	
5	Immune Responses to Human Immunodeficiency Virus Infection	89
	<i>Barton F. Haynes</i>	

Part II: Epidemiology

6	Global Aspects of Human Immunodeficiency Virus Epidemiology: General Considerations	103
	<i>Thierry Mertens and Peter Piot</i>	
7	Global Distribution of Human Immunodeficiency Virus-1 Clades	119
	<i>Donald S. Burke and Francine E. McCutchan</i>	
8	Epidemiology and Natural History of Human Immunodeficiency Virus Type 2	127
	<i>Phyllis Kanki</i>	
9	Epidemiology of Human Immunodeficiency Virus Infection in the United States	137
	<i>Susan Y. Chu and James W. Curran</i>	
10	Transmission of HIV	147
10.1	Transmission of HIV-1 Among Adolescents and Adults	147
	<i>Sten H. Vermund</i>	

10.2	Transmission of the Human Immunodeficiency Virus From Mother to the Fetus and Infant	167
	<i>K. Luzuriaga and J.L. Sullivan</i>	

Part III: Diagnosis of HIV Infection

11	Acquired Immunodeficiency Syndrome: Serologic and Virologic Tests	177
	<i>Julia A. Metcalf, Richard T. Davey, Jr., and H. Clifford Lane</i>	
12	Approach to the Individual Potentially Infected with the Human Immunodeficiency Virus	197
	<i>Jeffrey Moulton Benevedes and Donald I. Abrams</i>	

Part IV: Clinical Manifestations

13	Clinical Spectrum of Human Immunodeficiency Virus Diseases	203
	<i>Michael S. Saag</i>	
14	Infectious Complications	215
14.1	<i>Pneumocystis</i> and Other Protozoa	215
	<i>Catherine F. Decker and Henry Masur</i>	
14.2	Fungal Infections in Patients with the Acquired Immunodeficiency Syndrome	231
	<i>Michael A. Polis and Joseph A. Kovacs</i>	
14.3	Tuberculosis and Human Immunodeficiency Virus Infection	245
	<i>Michael O. Rigsby and Gerald Friedland</i>	
14.4	Other Bacterial Infections	259
	<i>John J. Zurlo and H. Clifford Lane</i>	
14.5	Herpesvirus Infections in Human Immunodeficiency Virus-Infected Persons	267
	<i>Timothy Schacker and Lawrence Corey</i>	
14.6	Human Papillomavirus and Hepatitis Viral Infections in Human Immunodeficiency Virus-Infected Persons	281
	<i>Nancy B. Kiviat</i>	
15	Tumors in HIV Infection	295
15.1	Kaposi's Sarcoma and Acquired Immunodeficiency Syndrome	295
	<i>Bijan Safai</i>	
15.2	Lymphomas and Other Cancers Associated With Acquired Immunodeficiency Syndrome	319
	<i>David M. Aboulafia and Ronald T. Mitsuyasu</i>	
16	Central and Peripheral Nervous System Complications	331
	<i>Richard W. Price and Bruce J. Brew</i>	
17	Oral Disease in Human Immunodeficiency Infection	355
	<i>John S. Greenspan and Deborah Greenspan</i>	
18	Gastrointestinal Manifestations of Human Immunodeficiency Virus Infection	365
	<i>Donald P. Kotler</i>	

19	Noninfectious Organ-Specific Complications of HIV Infection	393
19.1	Dermatologic Complications of HIV Infection	393
	<i>Bijan Safai</i>	
19.2	Noninfectious Pulmonary Complications of Human Immunodeficiency Virus Infection	405
	<i>Stewart J. Levine and James Shelhamer</i>	
19.3	Renal Complications	423
	<i>Jeffrey B. Kopp and James E. Balow</i>	
19.4	Hematologic Complications of Human Immunodeficiency Virus Infection	429
	<i>John P. Doweiko and Jerome E. Groopman</i>	
20	Pediatric Human Immunodeficiency Virus Infections	443
	<i>Brigitta U. Mueller and Philip A. Pizzo</i>	

Part V: Treatment of HIV Infection

21	Strategies and Progress in the Development of Antiretroviral Agents	467
	<i>Steven M. Schnittman and Carla B. Pettinelli</i>	
22	Pharmacology of Antiretroviral Agents	479
	<i>Charles Flexner and Craig Hendrix</i>	
23	Antiretroviral Therapy	495
	<i>Martin S. Hirsch, Richard T. D'Aquila, and Joan C. Kaplan</i>	
24	Immunologic Approaches to the Treatment of Human Immunodeficiency Virus Infection	509
	<i>Michael C. Sneller and H. Clifford Lane</i>	
25	Gene Therapy	519
	<i>Thierry VandenDriessche, Marinee K.L. Chuah, and Richard A. Morgan</i>	

Part VI: Psychosocial Aspects

26	Counseling Persons Seropositive for Human Immunodeficiency Virus Infection and Their Families	533
	<i>Lynda S. Doll and Beth A. Dillon</i>	
27	Psychiatric Considerations in Human Immunodeficiency Virus Disease	541
	<i>David G. Ostrow</i>	
28	The Community-Based Response to Acquired Immunodeficiency Syndrome	551
	<i>Derek Hodel</i>	

Part VII: Prevention and Public Health

29	Risk Factors for Sexual Transmission	569
29.1	Risk Factors for Sexual Transmission of Human Immunodeficiency Virus	569
	<i>Scott D. Holmberg</i>	
29.2	Effectiveness of Behavioral Interventions to Prevent Sexual Transmission of Human Immunodeficiency Virus Infection	577
	<i>David R. Holtgrave</i>	

30	Acquired Immunodeficiency Syndrome and the Injection of Illicit Psychoactive Drugs	583
	<i>Don C. Des Jarlais</i>	
31	Human Immunodeficiency Virus Transmission Through Blood, Blood Products, and Tissue and Organ Donations	595
	<i>Cladd E. Stevens</i>	
32	AIDS Vaccines	605
32.1	Acquired Immunodeficiency Disease Vaccines: Design and Development	605
	<i>Tun-Hou Lee</i>	
32.2	Clinical Trials of Human Immunodeficiency Virus Vaccines	617
	<i>Mary Lou Clements</i>	
33	Acquired Immunodeficiency Syndrome and Human Rights	627
	<i>Jonathan M. Mann</i>	
34	Human Immunodeficiency Disease: Ethical Considerations for Clinicians	633
	<i>Christine Grady</i>	

Part VIII: HIV Infection and the Health Care Worker

35	Occupational Risks of Human Immunodeficiency Virus Infection in Health Care Workers	645
	<i>Ruthanne Marcus and David M. Bell</i>	
36	Safety Precautions	655
36.1	Universal Precautions in the Health Care Setting	655
	<i>Elizabeth A. Bolyard and David M. Bell</i>	
36.2	Safety Precautions: Special Considerations for Surgeons	665
	<i>Louise J. Short and Daniel R. Benson</i>	
36.3	Special Considerations for Dentistry	675
	<i>Jennifer L. Cleveland and Donald D. Marianos</i>	
36.4	Special Considerations for Emergency Personnel	685
	<i>Gabor D. Kelen</i>	
36.5	Sterilization and Disinfection Strategies for Medical Instruments and Equipment	695
	<i>Martin S. Favero</i>	
37	Postexposure Management	701
	<i>Denise M. Cardo and David M. Bell</i>	
38	Societal Impact of the Acquired Immunodeficiency Syndrome Epidemic	709
	<i>Harvey V. Fineberg</i>	
Index		719