

Contents

<i>1 Introduction</i>	1
1.1 Historical Background	2
1.2 Virological Considerations	5
<i>2 Canine Parvovirus Disease Syndromes</i>	8
2.1 Canine Parvovirus-Induced Myocarditis	8
2.2 Canine Parvovirus Enteric Disease	11
2.3 Confirmation of Canine Parvovirus Infection	13
<i>3 Transmission</i>	15
<i>4 Vaccination Strategies</i>	16
4.1 Vaccination Failure I	16
4.2 Homologous Canine Parvovirus Vaccines	17
4.3 Vaccination Failure II	22
4.4 Current Problems with Vaccination	23
<i>5 Origins of Canine Parvovirus</i>	25
5.1 Comparisons of Canine Parvovirus with Known Related Parvoviruses	26
5.1.1 Monoclonal Antibody Techniques	26
5.1.2 Restriction Endonuclease Analysis and Sequence Analysis of Parvovirus DNA	28
5.2 Theories and Ideas on the Origins of Canine Parvovirus	31
5.2.1 Recombination of Canine Adenovirus with Binn's Minute Virus of Canines	31
5.2.2 Canine Parvovirus as a Variant of Field Strains of Mink Enteritis Virus or Feline Panleucopenia Virus	32

VI Contents

5.2.3 Canine Parvovirus as a Variant of a Vaccine Strain of Feline Panleucopenia Virus	33
5.2.4 Derivation from a Sylvatic Reservoir	35
5.2.5 An Attempt to Correlate the Evidence	36
5.2.6 Divergence of Two Canine Parvovirus Strains	39
 6 <i>Parvoviruses and Human Disease</i>	 40
 7 <i>Prospects and Problems</i>	 42
 <i>References</i>	 47