

Preface

The disease caused by bovine viral diarrhea virus (BVDV) was first described in 1946, along with virus isolation from sick cattle. In the intervening 60 years, many important advances have been made in understanding this virus and the disease it produces. These developments include the recognition of BVDV biotypes and genotypes; development of monoclonal antibodies (Mabs) to study strain variation; defining the mechanism of development of persistent infections, mucosal disease, and immune tolerance; BVDV-induced immunosuppression; the discovery of problems caused by the presence of BVDV and anti-BVDV antibodies in fetal bovine serum used in the production of cell cultures; sequencing of viral genome; and the development of rapid methods for virus detection. These achievements have culminated in the development of control and eradication programs in several Scandinavian countries with some successes. Many other

countries, including the U.S., are contemplating eradication and/or control programs.

In spite of these developments and several symposia dedicated to discussing the pathogenesis, transmission, diagnosis, and molecular virology of the virus, BVDV and BVDV-induced diseases are not completely understood, as exemplified by the appearance of severe hemorrhagic disease caused by BVDV 2 in the early 1990s in Canada and then in other countries. It is with this in mind that we have attempted to collate information on the current state of knowledge on the diagnosis, management, and control of the multifaceted diseases caused by BVD viruses. An internationally renowned team of experts has been assembled to contribute chapters on various aspects of this problem.

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