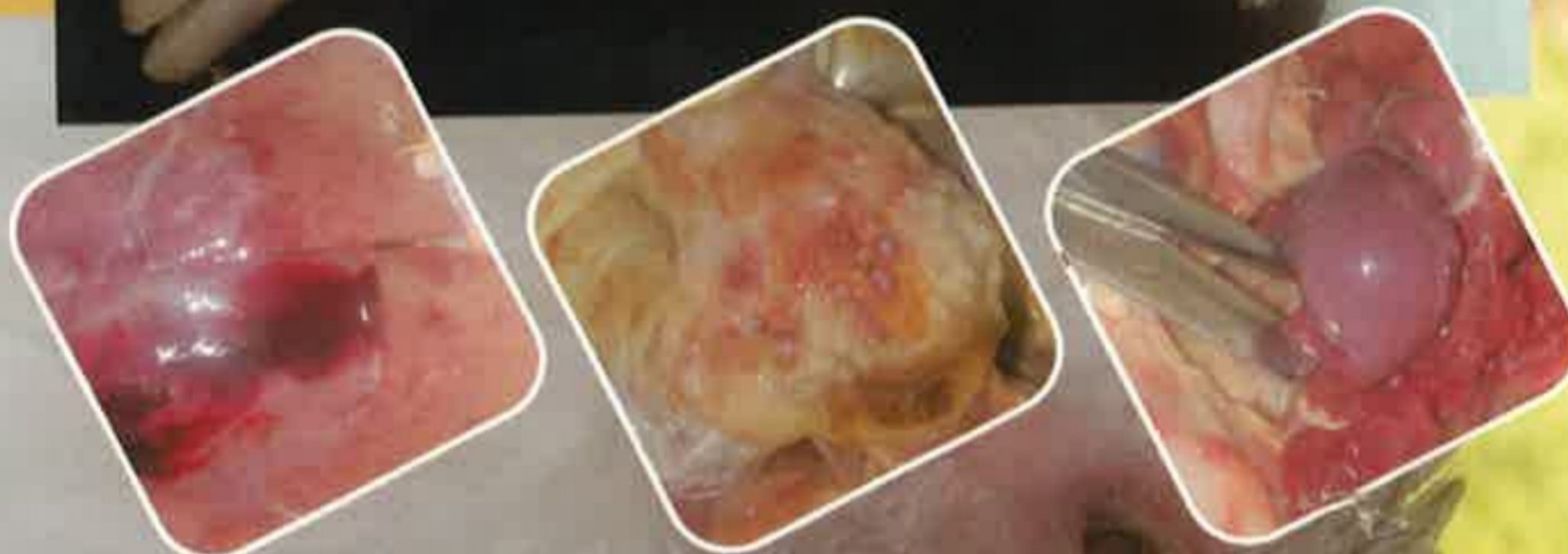




Avian Influenza or Bird

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S. Nandi

# **Avian Influenza or Bird Flu**

**Dr. S. Nandi**  
*Senior Scientist,  
Centre for Animal Disease Research and Diagnosis  
Indian Veterinary Research Institute  
Izatnagar, U.P.*

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## Preface

Influenza remains an important disease in humans, animals and birds. Avian influenza (AI) earlier known as fowl plaque or fowl pest, a highly contagious and infectious disease of birds, is now popularly known as avian flu or bird flu. All birds are thought to be vulnerable to avian influenza but poultry chicken, turkeys, quails, guinea fowls etc are more prone to AI virus which may reach rapidly to epidemic proportion. Influenza A viruses infecting poultry can be divided into two types: low pathogenicity avian influenza (LPAI) and highly pathogenic avian influenza (HPAI) or bird flu. Highly pathogenic AI has seriously affected poultry farmers whenever and wherever it has appeared. Historically, outbreaks of HPAI have occurred in all continents. Avian influenza virus is generally limited to poultry but an unprecedented epizootic of avian influenza A that is highly pathogenic has jumped the

species barrier in Asia to cause many human fatalities and likely to pose an increasing pandemic threat. Zoonotic potential of AI virus was first recorded in 1997 with hospitalization of 18 people (six died) following the infection with HPAI (H5N1) in Hong Kong. On 18<sup>th</sup> February, 2006 HPAI virus infection in poultry has been reported in Maharashtra, Gujarat and Madhya Pradesh states of India for the first time followed by in July, 2007 in Manipur and 15<sup>th</sup> January and 8<sup>th</sup> March, 2008 in W.B. Although the disease has been controlled in India, avian influenza is still prevalent in neighbouring countries and any moment it may enter into our country. Keeping in mind all the points, the book has been written on bird flu covering all the aspects in a simple and easily understandable manner. The book would be extremely helpful to the students, teachers, clinicians, technicians, researchers, farmers and general public. Lastly, comments and suggestions from all the corners are welcome to improve the quality of the book.

*S. Nandi*

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**Dr. Sukdeb Nandi** graduated in Veterinary Science and Animal Husbandry in 1986 from Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, W.B. He did his Master Degree and Ph.D. in Veterinary Virology from Indian Veterinary Research Institute in 1988 and 1992 respectively. He has been associated with teaching Veterinary Virology in the same institute for last 15 years. He is also involved in imparting trainings on serological and molecular diagnosis of different Viral Diseases of animals. He was awarded with DBT sponsored National Biotechnology Associateship and carried out research on biotechnological and molecular techniques of diagnosing the diseases at Indian Institute of Chemical Biology, Jadavpur, Kolkata from 1995 to 1996. He was also deputed to United Kingdom in 1998-1999 to undergo 'Transfer of Molecular Biology Training' (TOMBIT) at Institute for Animal Health, Pirbright to work on molecular aspects of Foot and Mouth Disease Virus. He has carried out research on Rabies, Sheep Pox, Goat Pox, Bluetongue, Infectious Bovine Rhinotracheitis and Canine Parvovirus infections in canines. He has travelled different places in United Kingdom, Scotland and France. Presently, he is working as Senior Scientist at Centre for Animal Disease Research and Diagnosis, Indian Veterinary Research Institute, Izatnagar, U.P. He is also the author of 'Manual of Viral Disease Investigation'—a book very much useful for the scientists, teachers, students, diagnostician and others who are working in this area.

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