Abstract

Avian mycobacteriosis is important for animal and human health; wild birds play an important role in mycobacterial species’ ecology and movement. This review was aimed at reporting the role of birds in the spread of avian mycobacteriosis in human and animal populations at risk and thus a systematic review was made of PubMed, Science Direct, Scielo and Scirus databases. Mycobacteria are classified into the Mycobacterium tuberculosis complex and non-tuberculous mycobacteria; the Mycobacterium avium complex represents the most important part of the latter because it is primarily responsible for mycobacterial infection in wild birds and it is a potential pathogen for mammals, especially for immunocompromised patients. The clinical signs in birds are variable as it is a chronic and debilitating disease, involving emaciated carcasses, white nodules in different organs and microscopically it presents granulomatosous multifocal inflammation. Diagnosis begins by suspicion based on clinical signs and finishes with microbiological confirmation. New diagnostic techniques include testing with DNA-RNA probes. No effective treatment is currently available and chemoprophylaxis on suspicion of infection is not recommended at the start; these factors increase the potential risk of mycobacteriosis becoming one of the most frequently documented zoonotic diseases which is difficult to treat in birds and humans. Recent concern regarding mycobacterial infection lies in the increased frequency of these opportunistic infections occurring in immunocompromised individuals and these infections potential impact on bird conservation, this being increased by greater contact between humans and wild and captive birds.

Keywords

Atypical Mycobacterium infection, wild animal, bird (source: MeSH, NLM).