REVIEW: THE EPIDEMIOLOGY AND ZOONOTIC RISKS OF CORONAVIROSES

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Abstract

The following paper includes a synthesis of bibliographical information regarding the main diseases caused by coronaviruses, both in animals (companion and domestic) as well as in humans, observing the imprevisible tendencies of this viral family. These data are completed by an epidemiological analysis of the main events caused by coronaviruses in humans, using the available databases.

Coronaviruses are worldspread entities, producing, in humans and animals, the most diverse diseases, with digestive, respiratory or nervous symptoms in animals, some forms being very serious and with special economic implications and others mild or even clinically unexpressed; in humans, the symptoms are predominantly respiratory, in some cases beginning with digestive signs and the complications that occur may be neurological in nature. Over the years, especially since 2002 (SARS-CoV), continuing with 2012 (MERS) and more recently, from 2019, culminating with SARS-CoV-2, it has been possible to identify the trend of zoonotic transmission (from animal to human), with a particularly high pathogenic potential of these viruses, which have different rates of morbidity and mortality. Another interesting aspect is the fact that cases of anthropozoonotic transmission (from human to animal) have been reported, in the case of pets, but also of fur animals (minks).

Keywords: coronavirus; infectious disease; animals; zoonosis; pandemic.