PubMed

1. Alteration of fibroblast phenotype by asbestos-induced autoantibodies.
   PMID: 21457077 [PubMed - as supplied by publisher]

2. Pulmonary physiology in pregnancy.
   PMID: 20436304 [PubMed - indexed for MEDLINE]

3. Host-pathogen interactions during coronavirus infection of primary alveolar epithelial cells.

4. Need for lung resection in patients with intact or ruptured hydatid cysts.
   Vasquez JC, Montesinos E, Peralta J, Rojas L, De La Rosa J, Leon JJ.
   PMID: 19629893 [PubMed - indexed for MEDLINE]

5. Variation in Pasteurella (Bibersteinia) and Mannheimia spp. following transport and antibiotic treatment in free-ranging and captive
   Rocky Mountain bighorn sheep (Ovis canadensis canadensis).
   Weiser GC, Miller DS, Drew ML, Riyan J.C, Ward AC.
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6. Severe mitral regurgitation and hepatopulmonary hydatid cysts: what should be treated first?
   Vasquez JC, De La Rosa J, Montesinos E, Rojas L, Peralta J, Leon JJ.
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7. Induction of innate immunity by lipid A mimetics increases survival from pneumonic plague.
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Host-pathogen interactions during coronavirus infection of primary alveolar epithelial cells.

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Abstract
Viruses that infect the lung are a significant cause of morbidity and mortality in animals and humans worldwide. Coronaviruses are being associated increasingly with severe diseases in the lower respiratory tract. Alveolar epithelial cells are an important target for coronavirus infection in the lung, and infected cells can initiate innate immune responses to viral infection. In this overview, we describe in vitro models of highly differentiated alveolar epithelial cells that are currently being used to study the innate immune response to coronavirus infection. We have shown that rat coronavirus infection of rat alveolar type I epithelial cells in vitro induces expression of CXC chemokines, which may recruit and activate neutrophils. Although neutrophils are recruited early in infection in several coronavirus models including rat coronavirus. However, their role in viral clearance and/or immune-mediated tissue damage is not understood. Primary cultures of differentiated alveolar epithelial cells will be useful for identifying the interactions between coronaviruses and alveolar epithelial cells that influence the innate immune responses to infection in the lung. Understanding the molecular details of these interactions will be critical for the design of effective strategies to prevent and treat coronavirus infections in the lung.