

Assignment

Explain the histological basis of upper respiratory system & conducting portion of the respiratory system attacked by corona virus

Answer

The virus enters the body when droplets from an infected person's sneeze touches anywhere on the face & the mouth, the nose or eyes. This gives the virus a passage to the ^{mucous} membrane in the throat. When this happens the immune system may respond with early symptoms such as sore throats, cough e.t.c. The virus then moves down the respiratory tract, the respiratory portion most especially the alveoli. The alveoli is lined with extremely thin squamous cells, because of the passage of oxygen from the airspace to the blood stream. Corona virus damages those extremely thin squamous cells making the alveoli thicker than it should be.

In between alveoli there is a thin interalveolar septa that consists of elastic and reticular fibres of connective tissue that have capillaries within it. When corona virus affects the alveoli it damages the layers and then scales of pneumocytes and hyaline cartilage from the capillaries leak out and overcome the small spaces causing the alveoli to be enlarged. The pneumocytes formed are enlarged. Large nuclei amphiphilic granular cytoplasm and prominent nucleoli are identified in the intra-alveolar spaces, showing a viral cytopathic-like changes. When this process occurs oxygen exchange will be difficult which causes the person to ^{find} it hard breathing, the person will then need help breathing.