

Unit 3 C21 Worksheet 17

CoVID19: Epidemiology, Pathophysiology, Diagnostics

1. What is the natural reservoir for corona virus? What is the “intermediate host” for the 2019 corona virus?
2. What is the significance of the “case fatality rate”? For CoVID19? Why might this number be lower?
3. What clinical condition is caused by this disease? (Note: the medical doctor who discovered this medical condition 50 years ago died from this syndrome on 4/3/2020 from CoVID19)
4. What is the significance of R0? Which disease has a greater “spreadability”, avian flu or CoVID19?
5. How can you reduce the spreadability of a virus?
6. How may the CoVID19 virus be transmitted?
7. When the virus gets into the respiratory system, what does it attack? What cell type in the alveoli does the virus enter? (What does this cell produce?)
8. What is the importance of the S-spike? What transmembrane protein does the S-spike attach to?
9. What is the nucleic acid type used by CoVID19? Once inside the cell, what will this nucleic acid be used to produce?
10. What is the significance of the RNA dependent polymerase?
11. So if the virus reproduces in the Type II lung cells and kills these cells, then what will happen to the macrophage inside the alveoli? What accumulates inside the alveoli? What is the net effect on the alveoli?
12. What is the problem caused by neutrophils being attracted into the lung tissue by the interleukins? What are neutrophils able to produce? (Remember free radicals?)
13. What effect do interleukins have on the central nervous system?
14. What are the clinical signs of CoVID19?
15. CoVID19 leads to septic shock. What does this do to your blood pressure?
16. How may it affect the kidneys?
17. How may it affect the liver?
18. What is the incubation period for this virus?
19. To determine CoVID19 what do you need to “rule out”?