

Royal College of Physicians of Edinburgh:

Learning points from RCPE Online Covid Update:

- Patients infectious 12h before the onset of symptoms
- Time from exposure to onset of symptoms is 5-6 days
- Time from symptom onset to recovery is 2-6 weeks
- Time from symptom onset to death is 2-8 weeks
- No longer infectious after 7 days
- Very low number of asymptomatic cases <1%

80% - mild disease, 14%- severe disease, 6% - critical
Fever and continuous cough are most common symptoms
SOB is a predictor of severe disease

Risk factors: age, multi-morbidity, immunosuppression, pregnancy is uncertain but treated as such until further data obtained

NB: It is clear that children have very mild disease and lower incidence rates, but currently unclear how much they are contributing to spread

Risk factors for disease severity: Hypertension and cardiovascular disease

ARDS is the main complication of severe disease, septic shock & DIC are less common

Lab markers for poor outcome: high troponin and high D Dimer (though treat with caution as high error bars in these data)

SOFA and CURB score predict poor outcome

Radiology: CT shows around glass opacity and consolidation (typical viral pneumonia) which tends to be bilateral, peripheral and confined to lower lobes

R_0 = number of patients 1 case is expected to infect

To eradicate disease need $R_0 \leq 1$

SARS $R_0 = 2.4$, then became <1 through control measures

Imperial college study showed that the best predicted intervention = case isolation, home quarantine and social distancing

A second wave in Winter 20/21 is likely

Treatment:

Remdesivir looks most promising but still await clinical trials

Also chloroquine, tocilizumab/other IL6 inhibitors are being trialled

Vaccine could be developed via the use of immunoglobulin from survivors

NB: All interventions should be done as part of clinical trial to help the population as a whole

They are confident that PPE is effective in preventing droplet transmission, EXCEPT for aerosol generating procedures - for this require FFP

Testing for healthcare staff would be advantageous but not feasible at this time due to lack of capacity

New tests are being developed to check antibody levels and therefore predict immunity.

Current preparedness in Edinburgh

- We are only admitting those with clinical severity
- No community testing except in special circumstances - outbreaks, homeless (who cannot self isolate), healthcare workers in areas with poor staffing
- Redeployment of junior doctors to areas of need
- Reduced elective surgery
- Outpatient services - via the phone or at home
- Rapid adoption of clinical trial protocols
- Current RECOVERY trial: inhaled interferon, kaletra, dexamethasone
- All specialties and grades to take ownership
- All staff to advocate self isolation
- Much higher demand for critical care colleagues
- Above all kindness and empathy are important