

Evaluation of coronavirus in tears and conjunctival secretions of patients with SARS-CoV-2 infection

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Objective

To assess the presence of novel coronavirus in tears and conjunctival secretions of SARS - CoV - 2 infected patients.

Definition:

Severe COVID-19 pneumonia has to have any of the ffg criteria:

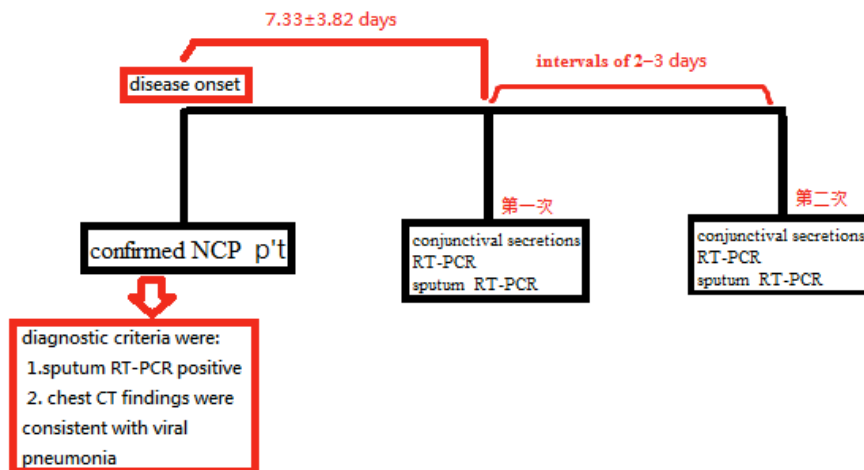
1. Respiratory distress (RR>30/minute),
2. Oxygen saturation $\leq 93\%$ or (PaO₂)/oxygen concentration FiO₂ ≤ 300 mmHg in the resting state,
3. Respiratory failure requiring mechanical ventilation,
4. Shock
5. Other forms of organ failure requiring monitoring and treatment at the ICU

Study population

30 confirmed novel coronavirus pneumonia (NCP) patients from 2020/01/26 to 2020/02/09

Methods

Tear and conjunctival secretions were collected by wiping the conjunctiva of the lower eyelid fornix twice every 2-3 days with disposable sampling swabs for PCR



Results

1. There were 21 patients with common-type and 9 patients with severe-COVID-19 pneumonia.
2. Two samples of tear and conjunctival secretions were obtained from the **only one patient** with conjunctivitis yielded positive RT - PCR results. Samples from other patients were all negative

Conclusion

We speculate that SARS-CoV-2 may be detected in the tears and conjunctival secretions in NCP patients with conjunctivitis. The virus was not detected in patients with no conjunctivitis.