Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

patients in groups 1, 2, and 3, respectively (P=0.3105). Mean Ct values in groups 1, 2, and 3 were 28.36 + 6.15, 29.00 + 5.58, and 27.86 + 6.46 (P= 0.92), respectively. Five patients showed positive RT-PCR results by all 3 methods (mean Ct value, 25.24 + 6.33), and 12 patients showed positive results by any of the 3 methods (mean Ct value, 32.16 + 1.94), the difference in Ct values being statistically significant (P=0.029). The median value of symptomatology in patients with positive RT-PCR results from tears was 5 days (range, 4-9 days).

Conclusions:SARS-CoV-2 RNA was detected in tears of 24% of patients with laboratory-proven moderate to severe COVID-19. Conjunctival swab remains the gold standard of tear collection for RT-PCR assay. A significantly higher possibility of viral transmission exists through tears in patients with moderate to severe COVID-19.

https://doi.org/10.1016/j.ijmmb.2021.08.240

COMPARISON OF TWO REAL-TIME POLYMERASE CHAIN REACTION ASSAYS FOR THE DETECTION OF SEVERE ACUTE RESPIRATORY SYNDROME-COV-2 FROM COMBINED NASOPHARYNGEAL-THROAT SWABS

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Background: In the absence of effective treatment or vaccine, the current strategy for the prevention of further trans- mission of severe acute respiratory syndrome (SARS) CoV-2 (COVID-19) infection is early diagnosis and isolation of cas- es. The diagnosis of SARS-CoV-2 is done by detecting viral RNA in the nasopharyngeal and throat swabs by real-time polymerase chain reaction (PCR). Many commercial assays are now available for performing the PCR assay. The aim was to evaluate the performance of the SD Biosensor nCoV real-time detection kit with the real-time PCR kit provided by the Indian Council of Medical Research-National Institute of Virology (ICMR-NIV), Pune (NIV Protocol).

Methods:A total of 253 pairs of nasopharyngeal-oropharyngeal swabs combined in a single viral transport medium were tested for viral RNA by both the protocols. The sensitivity and specificity of the SD Biosensor were calculated consider- ing the ICMR-NIV kit as the gold standard. Matched pairs of recorded cycle threshold values (Ct values) were compared by Pearson's correlation coefficient.

Results: Concordant COVID-19 negative and positive PCR results were reported for 113 and 77 samples, respectively. The SD Biosensor kit additionally detected 62 cases, which were found negative by the NIV protocol. In all discordant positive results by the SD Biosensor kit, the average Ct values were higher than the concordant positive results. A total of forty samples tested positive for E gene by SD Biosensor and having Ct values <25 had 100% concordance with NIV protocol results and 39 samples tested positive for E gene by SD Biosensor having Ct value >32 were all found negative by the NIV protocol.

Conclusions: The results highlight the need for careful evaluation of commercial kits before being deployed for screening of COVID-19 infections

https://doi.org/10.1016/j.ijmmb.2021.08.237

PERSISTENCE OF SARS-COV-2 ON SURFACES IN PATIENT CARE UNITS AND LABORATORY IN A DEDICATED COVID-19 HOSPITAL IN NEW DELHI

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Background: In the wake of Covid-19 pandemic, there has been a growing concern over the various modes of spread of virus. While airborne droplet transmission must be considered, and is a critical component to the safety of healthcare workers, it is also important to consider the role of surfaces. Knowing the extent of environmental -contamination of SARS-CoV-2 will play a significant role in improving the safety practices in hospital-settings as well as in answering ques- tions about virus-transmission among the public.

Methods: Swab samples were collected from surfaces in Covid-19 wards and laboratory. Sterile premoistened swabs were used to collect samples from high-contact surfaces like door-handles, light-switches, faucet-handles, flushing- buttons, slabs, biosafety-cabinets etc. A total of 48 samples were tested with an RT-PCR test kit, targeting the envelope (E) and RNA dependent RNA polymerase (RdRp) of SARS-CoV-2. A cycle threshold (Ct) ≤36 was considered as positive for SARS-CoV-2 RNA and Ct >36 was considered as negative.

Results: Among the 48 samples, RT-PCR analysis showed SARS-Cov2 RNA (E-gene positive, RdRp positive) in three sites (6.25%), while six samples (12.5%) were screen-positive (E-gene positive, RdRp negative) despite routine decontamina- tion of the surfaces. SARS-CoV-2 RNA was detected in samples collected from the electric-switches and door-handles in the Covid-19 ward and testing-area.

Conclusions: The routine decontamination protocol must include previous mapped high touch surfaces in the area. De- spite decontamination standard precautions must be followed in healthcare settings.

https://doi.org/10.1016/j.ijmmb.2021.08.238

COVID -19 ASSOCIATED PULMONARY ASPERGILLOSIS IN IMMUNOCOMPETENT PATIENT – A CASE REPORT

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Background: One of the complication of Coronavirus disease (COVID-19) is secondary infection. The patients with severe Covid-19 who are admitted in ICU are at increased risk of developing co-infections due to various reasons. Recent stud- ies have showed that 19-26% of patients admitted in ICU developed Pulmonary Aspergillosis. But most of the cases are underdiagnosed due to difficulties in diagnostic methods to collect clinical samples due to the aerosols generation. In this case report, Aspergillus was isolated from sputum sample of a patient.

Methods:A 53 years old male patient recovered from Covid-19 two months back presented with c/o chest pain, difficul- ty in breathing and Haemoptysis to the emergency department. On admission, O2 saturation was 70%, Xray Chest revealed B/L midzone cavity, CT chest: Paraseptal emphysematous changes, involving B/L upper lobe (Grade 4). Hb: 7g/dl, WBC count 17000cell/cumm (Neutrophil -79%), CRP: 153mg/L, IL-6- 804 pg/mL. The patient was suspected to have bac- terial and fungal co-infection. He was empericallly started with Meropenam, Voriconazole and ATT. GenExpert for MTB was negative. The sputum, blood, urine and stool samples were received in Microbiology laboratory for bacterial and fungal culture. Blood, Sputum, Urine & Stool culture were negative for bacterial pathogens. Fungal culture: Heavy growth of Aspergillus fumigatus was observed within 72 hours in sputum sample.

Results:COVID-19 associated with Pulmonary Aspergillosis is a recently described syndrome that affect Covid -19 pa- tients with ARDS. In this case we reported Aspergillus fumigatus in culture as secondary infection 2 months after Covid pneumonia.

Conclusions: Invasive Pulmonary Aspergillosis may complicate severe Covid-19 pneumonia. Hence in ICU patients with Pneumonia who do not respond to antibiotics, sputum sample has to be subjected for fungal culture. Antifungal susceptibility testing should also be performed due to the global emergence of triazole resistance.

https://doi.org/10.1016/j.ijmmb.2021.08.239

EVALUATION OF THE SECONDARY BACTERIAL INFECTIONS OF RESPIRATORY TRACT IN COVID 19 PATIENTS

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Background:A novel corona virus known as severe acute respiratory syndrome corona virus 2 was first reported in Wu- han city of China.The spectrum of clinical presentation of COVID 19 is highly variable,infections range from being asymp- tomatic to severe viral pneumonia with respiratory failure often leading to death.some patients found to be additionally infected with a secondary bacterial infection with 50% fatalities due to the COVID 19 caused by untreated or