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While performing pooled sample testing it might be advisable to use those kits that performed best regarding the positive identification in samples pool i.e. TRUPCR SARS-CoV-2 Kit, TaqPath RT-PCR COVID-19 Kit, Allplex 2019-nCoV Assay and BGI Real time RT PCR kit for detecting SARS CoV – 2.

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#### CROSS REACTIVITY OF DENGUE, SCRUB TYPHUS AND WIDAL TEST AMONG COVID-19 POSITIVE PATIENTS

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**Background:** Since December 2019, Coronavirus disease (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in the international scene as a major public health concern. COVID-19 pandemic is having a disrupting impact on health systems throughout Asia, Europe and America. At the same time, a large outbreak of dengue is ongoing with several deaths being recorded. In the near future, the overlap of COVID -19 and dengue epidemics is a concrete threat in tropical regions. Rickettsia infections are also being increasingly recognized as a cause of acute febrile illnesses and should be considered a distinct possibility in patients presenting with suggestive clinical features. Undifferentiated acute febrile illness is a common presentation in primary care settings and has wide-ranging etiologies leading to diagnosis based on clinical features and empirical management, due to the broad spectrum of differential diagnoses and lack of suitable point-of-care tests.

**Methods:** A total of 175 patients tested positive on nasopharyngeal and oropharyngeal swab for SARS - CoV-2 by Real time PCR were included in the study at Department of Microbiology, RIMS, Ranchi. Serum samples were collected from all positive patients within 7 days of their admission and were tested for Dengue NSI Antigen (PanBio Kit) and Scrub typhus IgM antibody (Inbios kit) by ELISA. COVID-19 positive patient's serum were also tested for Widal.

**Results:** Among 175 COVID-19 positive sera, no positive Dengue virus (DENV) NSI Ag results were observed. On the other hand, 14 patients were tested positive for Scrub typhus IgM antibody and widal was positive among 36 serum sample showing 0%, 8% and 20% false positive rate respectively.

**Conclusions:** Co-infections, whether true or due to serological cross-reactivity, appear to be a separate entity so far as presentation and morbidity is concerned. Further insight is needed into the mechanism and identification of the infection

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#### A COMPARITIVE STUDY BETWEEN SARS-COV2 ANTIGEN POSITIVE SAMPLES WITH CYCLE THRESHOLD VALUES FROM RT-PCR TESTING

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**Background:** In routine clinical practice, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection is determined by real time RT-PCR. In the current pandemic, the demand for a more rapid method of testing is increasing. Here, the performance of rapid COVID-19 antigen test based on lateral flow immunochromatographic assay for SARS- CoV-2 antigen was evaluated. The samples used for the antigen test were nasopharyngeal (NP) swabs from suspected COVID-19 cases. Diagnostic accuracy was compared to SARS-CoV-2 quantitative real-time RT-PCR.

**Methods:** The study was carried out at the Virology Laboratory, Department of Microbiology, Sharda Hospital. Nasopharyngeal swabs were collected and subjected to COVID-19 rapid antigen testing. Thereafter both nasopharyngeal as well as oropharyngeal samples were taken from the earlier antigen positive tested patients and were then used for detection of virus particles via RT-PCR.

The cycle threshold values were duly noted and a comparative was then drawn to determine the range of cycle threshold values which were observed for antigen positive patients.

**Results:** The results of the study will be revealed subsequently on the day of presentation.

**Conclusions:** The conclusion of the study will be revealed subsequently on the day of presentation

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#### CLINICAL PROFILE OF COVID-19 IN CHILDREN: A SINGLE CENTRE, RETROSPECTIVE STUDY FROM EASTERN INDIA

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**Background:** The burden of corona virus disease of 2019 (COVID-19) in children is less well studied compared to adults. This study is to provide Clinical Profile of children positive for COVID-19 admitted to a tertiary care hospital with focus on mode of presentation, severity of disease, associated co-morbidities, radiological and biochemical abnormalities and outcome.

**Methods:** This retrospective study included 74 children positive for COVID-19 admitted to a tertiary care hospital in eastern India between March 24 and August 31, 2020. Symptomatic screening and testing for SARS -CoV-2 through RT PCR in the hospital was started on 16th March 2020 as per the prevalent national guidelines. Universal screening for COVID 19 of all the newly admitted patients to the hospital started in middle of June 2020.

**Results:** Of the 74 children included in the study 45 (60.8%) were male, and the median age was 5 years (range: 5 days –14 years). 35 patients (47.3 %) had pre-existing comorbidities, 27 patients (36.5 %) were diagnosed incidentally and 47 patients (63.5 %) presented with respiratory symptoms. 8 patients (10.8 %) required supplemental oxygen support. The median length of hospital stay was 8 days (range: 5 days -20 days). Chest X ray was abnormal in 11/32 (34.4%) of children imaged. 21/73 (27.8 %) patients were from containment zones. In 31/54 (57.4%) patients, at least one family member tested positive. Hydroxychloroquine therapy was used in 10 patients (13.5 %), and azithromycin was used in 34 patients (45.9%). The case fatality rate was 2 (2.7%).

**Conclusions:** In this single centre retrospective study, severe illness in children in terms of Intensive care unit admission and death was far less frequent. However, as the pandemic is still evolving, larger and more extensive studies with follow up are required for better understanding of Covid-19 in Children

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#### PREVALENCE OF CORONA VIRUS IN PREOPERATIVE PATIENTS AT A TERTIARY CARE HOSPITAL

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**Background:** Novel corona virus has been identified as new strain of corona virus causing viral pneumonia, dyspnoea in humans with increasing morbidity and mortality. Real Time PCR, is a nuclear derived method for detecting the presence of ORF1ab Gene and N Gene, in suspected covid patients.

**Methods:** A prospective study was done in ACS Medical College from October 2020 to November 2020. Through Meril COVID-19 One-step RT-PCR Kit real time PCR we detect ORF1ab Gene and N Gene. We collected 88 samples from preoperative patients.

**Results:** out of preoperative patients we found 6 patients positive for corona virus, hence prevalence rate of corona virus among preop patients is 6.8%.