

ORIGINAL ARTICLE

Characteristics, Treatment Outcomes and Role of Hydroxychloroquine among 522 COVID-19 hospitalized patients in Jaipur City: An Epidemio-Clinical Study

Sudhir Bhandari^{1*}, Ajeet Singh¹, Raman Sharma¹, Govind Rankawat^{1}, S. Banerjee¹, Vishal Gupta¹, Amitabh Dube², Shivankan Kakkar², Shrikant Sharma¹, Prakash Keswani¹, Abhishek Agrawal¹, Amit Tak², CL Nawal¹**

ORIGINAL ARTICLE

Clinical Profile of Covid-19 Infected Patients Admitted in a Tertiary Care Hospital in North India

Sudhir Bhandari, Abhishek Bhargava, Shrikant Sharma¹, Prakash Keshwani, Raman Sharma, Subrata Banerjee

Clinico-Radiological Evaluation and Correlation of CT Chest Images with Progress of Disease in COVID-19 Patients

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A preliminary clinico-epidemiological portrayal of COVID-19 pandemic at a premier medical institution of North India

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ORIGINAL ARTICLE

COVID-19 Related Mortality Profile at a Tertiary Care Centre: a Descriptive Study

Sudhir Bhandari,¹ Raman Sharma,¹ Ajit Singh Shaktawat,¹ Subrata Banerjee,¹ Bhoopendra Patel,² Amit Tak,⁴ Deepa Meena,³ Abhishek Agarwal,¹ Vishal Gupta,¹ Shrikant Sharma,¹ Sunil Mahavar,¹ Radhey Shyam Chejara,¹ Govind Rankawat,¹ Kapil Gupta,⁴ Jitendra Gupta,⁴ Amitabh Dube,⁴ Shivankan Kakkar⁵

Logistic Regression Analysis to Predict Mortality Risk in COVID-19 Patients from Routine Hematologic Parameters

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The epidemiological and trending pattern of nCOVID-19 in the state of Rajasthan, India

Sudhir Bhandari, Ajeet Singh, Subrata Banerjee, Raman Sharma, Govind Rankawat, Vishal Gupta, Prakash Keswani, Ashwin Mathur, Abhishek Agarwal, Shrikant Sharma, P. D. Meena

A multistate ecological study comparing evolution of cumulative cases (trends) in top eight COVID-19 hit Indian states with regression modeling

Sudhir Bhandari¹, Ajit Singh Shaktawat¹, Amit Tak², Bhoopendra Patel³, Kapil Gupta², Jitendra Gupta², Shivankan Kakkar⁴, Amitabh Dube²

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American Journal of Emergency & Critical Care Medicine

Research Article

A Comparative Study of Hydroxychloroquine and add on Lopinavir-Ritonavir Therapy in Symptomatic COVID-19 Patients- @

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EDITORIAL

COVID-19 Pandemic, Passing of Professor Folke Sjöqvist and Other Topics

Miloš P Stojilković¹

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Clinico-Radiological Evaluation of COVID-19 Pneumonia and Its Correlation with USG Chest: Single Centre Study at SMS Hospital, Jaipur

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A multistate ecological study comparing evolution of cumulative cases (trends) in top eight COVID-19 hit Indian states with regression modeling

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Relationship between blood group phenotypes (ABO, Rh and Kell) and nCOVID-19 susceptibility – A retrospective observational study.

Coronavirus Disease of 2019: The Premise for Framing Strategies towards Infection Prevention Control Management

Sudhir Bhandari, Ajit Singh, Raman Sharma, Sudhir Mehta, Shivankan Kakkar¹, Jitendra Gupta², Kapil Gupta², Amit Tak², Amitabh Dube²

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Evidence based decision making and COVID-19: what a posteriori probability distributions speak.

Evaluation of Clinico–Radiological Profile and Correlation with Ultrasonography of the Chest in Coronavirus Disease 2019 Pneumonia

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Evaluation of Neutrophil to Lymphocyte ratio (NLR) and its utility as a prognostic marker in COVID-19 patients

COVID-19



Sudhir Bhandari, Sandhya Gulati, Nidhi Sharma, Ankur Kumar, Govind rankawat ,
Ajeet Singh

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Evolving trajectories of COVID-19 curves in India: Prediction using autoregressive integrated moving average modeling.

Original Article

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Correlation of Coagulation Abnormalities and Severity of Disease by Computed Tomography in Indian COVID-19 patients

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International Journal of Diabetes in Developing Countries

Impact of Glycemic Control in Diabetes Mellitus on Management of COVID-19 Infection

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A Comparative Study of Clinical Manifestation and Severity of COVID-19 Infection in
Patients with and without Diabetes Mellitus
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A Preventive Study on Hydroxychloroquine Prophylaxis Against COVID-19 in Health Care Workers at a Tertiary Care Center in North India

ABSTRACT

Background: The menace of COVID-19 has put a huge burden on health care system predisposing health care workers engaged in management to COVID-19 infections. The non-availability of effective drug against COVID-19 warrants extra cover as prophylactic therapy for health care workers, especially against transmission from asymptomatic patients. Hydroxychloroquine (HCQ) for prophylaxis of COVID-19 had been advocated by some researchers. Hence, in this project, evaluation of HCQ as preventive strategy for healthcare workers against COVID-19 infection was studied.

Materials and Methods: HCQ was prescribed as a prophylactic therapy as per the advisory of National Task Force of Indian Council of Medical Research, India. The data regarding consumption profile, COVID-19 infection and adverse drug reaction profile of HCQ in healthcare workers was collected.

Results: Record of 4,239 health workers with hydroxychloroquine consumed was available till date. 139 subjects were dropped out of study as they did not consume the HCQ tablets. 93 health workers (2.19%) were infected with COVID-19 infection but in early weeks of prophylactic therapy and were asymptomatic. A few of them (08 patients) had mild symptomatic manifestation with RT-PCR reported positive for SARS-CoV-2. No mortality was reported as among healthcare workers, engaged in management of COVID-19 patients at the tertiary care institute in Jaipur, India. HCQ prophylaxis in standard doses produced predominantly gastrointestinal side effects in 20 subject and headache in 10 health workers.

Conclusion: The present study showed that HCQ prophylaxis is safe and effective in standard doses against COVID-19 infection. The frontline workers engaged in management of COVID-19 may be given HCQ prophylaxis as an extra cover. However, it's broadening usage as preventive strategy, in general for people especially in cardiovascular incidences; require enhanced research and further validation.

Key words: Adverse drug reaction, COVID-19, health workers, hydroxychloroquine, prophylaxis

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Case Report

Avascular necrosis of bone with hemiparesis: a rare presentation of primary antiphospholipid antibody syndrome

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**Demystifying COVID-19 Lung Pathology: A
Clinicopathological Study of Postmortem Core Needle Biopsy**

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Abstract:	<p>Background: Atypical presentation of COVID-19 from classic ARDS needs to be extensively evaluated to understand the patho-physiology so as to optimize the management protocol for severely ill patients to abrogate the terminal event.</p> <p>Material: Autopsy core needle biopsies of lungs were obtained from 12 patients who died from covid-19. Routine histopathological examination of lung tissue along with immunohistochemical analysis of C4d complement staining was studied. Formalin-fixed paraffin embedded (FFPE) biopsy material was also subjected to Real time reverse transcription polymerase chain reaction for SARS-COV2 gene.</p> <p>Results: In the study all the deceased patients were symptomatic with two third suffering from isolated SARS-Cov2 related pneumonia while remaining one third had secondary COVID-19 infection. Histopathological evaluation highlights diffuse alveolar damage as the predominant pattern, however complement mediated endothelial injury of septal microvasculature and micro-thrombi was also distinctly observed with increased serum levels of D-Dimer and FDP. The patients who had extra-pulmonary manifestations at the time of presentation also showed pulmonary vascular lesions on histopathologic examination. Our study confirms the presence of coagulopathy and immune mediated micro-thrombi in pulmonary septal microvasculature in patients with severe disease.</p> <p>Conclusion: The results of our small series of patients highlight the possibility of immune mediated pulmonary vascular injury and thrombosis which has the potential to evolve into large vessel thrombosis and pulmonary embolism in critically ill patients. Definitive therapeutic management protocol including thrombo-embolic prophylaxis and development of effective immune-modulatory target could possibly reduce mortality in severely ill patients.</p>

Tocilizumab: An Effective Therapy for Severe and Critical ill COVID-19 Patients

ABSTRACT

Background: Cytokine storm and inflammatory response in COVID-19 is well established. Tocilizumab (TCZ), a monoclonal antibody against most prevalent cytokine interleukin-6 (IL-6) is an emerging therapeutic option for COVID-19 infection. The present study was undertaken to assess therapeutic response of TCZ therapy in severe or critical ill COVID-19 patients and its' role as an effective modality of management.

Methods: The present retrospective, observational study included 30 admitted severe or critical ill COVID-19 patients, treated with TCZ therapy on behalf of raised IL-6 levels. The patient's data (after anonymising and de-linking) concerning medical history, clinical manifestation, chronic medical illness, arterial blood gas analysis, requisite supplemental oxygen, mode of oxygenation, radiological imaging and outcome were extracted from their medical records. The parameters of clinical status, blood gas analysis and required oxygenation were serially assessed pre and post TCZ infusion and comparative evaluation was done.

Results: All patients of study group had symptomatic presentations with raised mean body temperature of 100.78°F, reduced mean oxygen saturation (SpO₂) at room air of 86.24% and mean PaO₂/FiO₂ (PF) ratio of 205.41 before TCZ infusion. All patients had raised IL-6 level (mean value 206.56 pg/mL) that was extremely elevated in 90% patients. Infusion of TCZ dramatically reduced mean body temperature (100.78°F to 99.32°F) and requirement for supplemental oxygen (68% to 48%) and improved mean SpO₂ (86% to 89%) and mean PF ratio (208 to 240) within 24 hours. Three patients on non-invasive ventilation were weaned off after TCZ infusion. There was a decreased average CT severity score from 16.16 to 7.08 and requirement for oxygen support decreased from 100% to 21% after TCZ infusion. Serum levels of IL-6 were raised initially but declined within 3 to 5 days of post TCZ infusion.

Conclusion: TCZ appears to be an effective therapeutic option in severe or critical ill COVID-19 patients with raised IL-6 levels. TCZ immediately improves clinical status of patients by probable mechanism of inhibition of cytokine storm and reduces COVID-19 related mortalities.