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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Conclusion: Given comparable findings in the presence and distribution of abnormalities between POCUS and chest CT, POCUS may be a viable alternative to chest CT for diagnosis and risk stratification in patients with suspected COVID-19.

153 Do Hydroxychloroquine, Disease-Modifying Antirheumatic Agents or Steroids, Serve to Prevent COVID-19 Infection?

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Study Objectives: Emergency physicians and other specialists are in critical need of medicinal agents to prevent SARS-COV-2 (COVID-19) infection. International attention has been given to hydroxychloroquine (HCQ), in particular, and other antirheumatologic agents for this purpose. Several very commonly used medications work to block the cascade of chemotactic influences and macrophage activation, but definitive prevention of ARDS is inconclusive. Agents proposed include TNF blocking agents, leukotriene antagonists and steroids. It may be possible to block infection, pneumonia and ARDS with prior use of these agents. The objective of this study is to compare attack rates of COVID-19 among patients who were already taking common rheumatologic agents prior to the COVID epidemic in the study region and those not taking these agents.

Methods: A retrospective cohort design Data was used across multiple hospitals in MI: 990 patients with lupus (SLE) or rheumatoid arthritis (RA) and a COVID-19 test (whether negative or positive) were included. Agents chosen for analysis included HCQ, sulfasalazine, hydroxychloroquine, methotrexate and steroids. Unadjusted differences between treatment groups with chi-square or Fisher Exact tests were used. Use of all agents other than HCQ and montelukast were combined as one group for comparative analysis. Adjusted treatment effects were estimated using logistic regression. Predictive covariates for the latter included demographics and Charlson comorbidities. Influenza testing was also evaluated.

Results: After dropping N = 30 patients with no data on pre-COVID prescriptions, a sample size of N = 960 patients with an existing diagnosis of rheumatoid arthritis (RA) or systemic lupus erythematosus (SLE) were analyzed. Of these patients, N = 214 patients had an active HCQ prescription at admission and N = 82 patients had a positive COVID-19 test result. None of the unadjusted or adjusted outcomes were statistically different between the "pretreatment" groups (on-agent or off-agent) for HCQ for other rheumatological agents tested as a group, or for steroids.

Conclusion: In a retrospective observational study, there was no evidence of benefit for the prophylactic use of hydroxychloroquine, several representative rheumatologic agents or steroids for the prevention of infection with COVID-19.

154 Virtual Telemedicine Training for Emergency Medicine Residents during the COVID-19 Pandemic

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Study Objectives: With the dawn of the COVID-19 pandemic and the need for enhanced social distancing measures, telemedicine has become an integral part of emergency medicine. Medical schools have started to integrate telemedicine training into their curricula, but there are few reports of telemedicine training in GME programs. The primary objective of this study was to examine current emergency medicine resident knowledge of telemedicine, expose residents to standardized telemedicine patients virtually, and analyze the effectiveness of telemedicine training on completing a successful encounter.

Methods: Seventeen emergency medicine residents first underwent a virtual standardized telemedicine encounter using the ZoomTM application without prior training in telemedicine. Standardized patients were queried on resident success during this untrained encounter using a survey with aspects of a successful encounter. The following session with sixteen of those 17 residents, involved a lecture by a telemedicine physician with years of experience on the fundamentals of a successful encounter, as well as pre-reading materials on the topic. After this intervention, sixteen residents underwent a repeat virtual encounter, with standardized patients responding to the same questions as the pre-training. Residents also underwent a post-survey on their experiences.

Results: Standardized patients evaluated 17 emergency residents before telemedicine training, and 16 of those 17 residents after telemedicine training. A 13-question survey focused on aspects of a successful telemedicine interview. Statistically significant differences were noted on aspects of the encounter related to telemedicine when analyzing pre- and post-training data and using a Z test for proportions: obtaining informed consent (0% vs. 61%, p = 0.00012), asking about privacy in the patient’s environment (6% vs. 87%, p < 0.00001), verifying name and/or date of birth (29% vs. 94%, p = 0.00014). Aspects of the encounter that did not have statistically significant results on pre- and post-tests surveys included: resident introducing themselves (94% vs. 100%, p = 0.31732), asking focused questions about medical condition (100% vs. 100% p = 1), closing the encounter by explaining care plan (94% vs. 94%, p = 1). Fourteen residents responded to a post-training survey with 92.8% of respondents stating that they “strongly agree” that the telemedicine training was helpful to their education. Only 28.6% of respondents stated that they “strongly agree” that they understood how to do a virtual physical exam.

Conclusion: Overall, emergency medicine residents had significant improvement on aspects of an encounter with a standardized patient that were unique to telemedicine after undergoing training from an expert in the field. Residents scored well both before and after training on aspects of the encounter not pertaining specifically to telemedicine, suggesting good clinical overlap between virtual and in-person environments. Residents uniformly felt the training was helpful to their education. Participants did feel less confident with the ability to do a virtual physical exam, which could possibly be ameliorated with more practice in this environment. Many EM residencies are undergoing virtual didactics and because of this, similar training could easily be utilized across the country. This training could prove to be essential in the future because of the global health crisis of the COVID-19 pandemic.