

TO BREATHE AGAIN: An Osteopathic Approach to Respiratory Failure Due to SARS-CoV-2

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Introduction

Respiratory failure is a potentially serious complication for patients infected with SARS-CoV-2. Early treatment protocols were not well established at the beginning of the associated pandemic. At that time, the medications predicted to most effectively decrease morbidity and mortality were utilized. The Multicenter Osteopathic Pneumonia Study of the Elderly (MOPSE) showed Osteopathic Manipulative Treatment (OMT) significantly decreased length of stay for hospitalized pneumonia patients. The efficacy of OMT performed on ventilated patients in the setting of respiratory failure due to SARS-CoV-2 has not been documented.

Case Presentation

A 56-year-old African American female with hypertension presented with dyspnea and was admitted with suspected SARS-CoV-2. She developed respiratory failure, was intubated, and was transferred to the intensive care unit within 48 hours. Medical therapy was initiated with antibiotics, an immunosuppressant and zinc. The patient was treated with OMT twice daily during her 16-day hospitalization using myofascial release, soft tissue, and lymphatic techniques prior to being discharged home.

Results

The patient exhibited decreased length of stay and number of days to clinical stabilization compared to similar SARS-CoV-2 patients that were not treated with OMT. Pre- and post-treatment FiO₂ was monitored and improved in a stepwise fashion.

Discussion

This patient experienced moderate clinical improvement utilizing the 8-step OMT protocol previously described in the MOPSE study. The addition of OMT to this patient's treatment appeared to be more effective than medical treatment alone for SARS-CoV-2 patients with respiratory failure. This study is limited by being a single case that occurred early in a pandemic for which no standard medical treatment protocol had been established. Future studies could include a clinical trial of the adjuvant use of OMT for ventilated SARS-CoV-2 patients.