

Not all burn centers are quiet during the COVID-19 crisis

Editorial on JBCR-D-20-00228R1 "Trends in Burn Injuries in Northern Israel during the COVID-19 Lockdown"

David G. Greenhalgh, MD, FACS

Shriners Hospitals for Children Northern California and Firefighters Regional Burn Center at
University of California, Davis

Correspondence:

David G. Greenhalgh, MD, FACS

2425 Stockton Blvd.

Sacramento, CA, 95817

Phone: 916 453-2050

Fax: 916 453-2373

e-mail: dggreenhalgh@ucdavis.edu

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COVID-19 has had a profound influence on all aspects of life around the world. The effects of the pandemic on healthcare has also been discussed in many fields of medicine. It seems as though there are more COVID papers than those covering all other diseases or injuries combined. The American Burn Association has sent out surveys every week or so to burn centers to ask how COVID-19 has influenced burn care. It is not surprising that authors from Northern Israel have reported how their lockdown has reduced all visits, and not surprisingly, reduced the number of burns seen in the emergency department (ER) (1). Amazingly, they had over a 40% reduction in all adult admissions and 67% reduction in adult trauma patients compared to the average the three preceding years. In a similar fashion, they had a two-thirds reduction in burn patients (from 30 to 10). If one looks at the ratio of burn patients to all patients, this reduction in burn patients is not different from previous years. As the authors state, the remarkable reduction in ER visits is likely related to the fear of going to a hospital that treats COVID-19 patients. Whether one is safer at a grocery store versus a hospital is debatable, but one cannot blame people from going to the site of COVID-19 treatment. One could also consider that during non-pandemic times people are over-utilizing emergency departments for relatively minor injuries or illnesses that could be treated elsewhere. A little bit of fear of contracting a serious illness pushes people to tolerate minor injuries or illnesses.

When the authors focused on pediatric visits, they claim to have a different story. They found that while there was a 52% reduction in all pediatric visits and 53% reduction in pediatric trauma, there was no “statistical” change in number of children with burns. There was actually a 24% reduction in pediatric burns, but the numbers are so small (21 to 16) that, while “statistically” insignificant, a change in 2-3 patients would likely make that the reduction approach statistical difference. The point is that with low numbers, the likelihood of a “type 2” statistical error (concluding statistical difference when the numbers are too low, and Power is too low) is much higher. The authors go on to emphasize that the 2-5 age group had a “statistically significant” increase in burns, likely attributed to being in the kitchen. While I agree that children spend more time at home during lockdowns, one must

question whether the difference between 5 and 9 patients suggests a major increase in cooking-related injuries. Either way, the paper is well written and worth publishing. I just was asked to comment and feel that the readers should focus on actual numbers when making their own conclusions.

The authors of this paper had average burn sizes of less than 4% total burns surface area (TBSA). I would also like to point out that not every burn center has had a major drop in burn numbers. In Northern California, we had a more gradual rise in COVID-19 numbers, and despite “shelter in place” orders, we had no reduction in adult or pediatric burns. We have had sustained COVID-19 numbers in our region since the beginning of the summer and into September. Our burn admissions have also increased for both pediatric and adult patients. Right now, in our adult unit we have had recent admissions with 85%, 81%, 80%, 76%, 74%, 61%, 55.5%, 50% TBSA burns and many smaller ones. Maybe the pandemic is increasing risky behavior in Northern California. While it is important to manage COVID-19 patients, one must not forget that burn injuries are not going away.

Reference

Kruchevsky D, Arraf M, Levanon S, Capucha T, Ramon Y, Ullmann Y. Trends in Burn Injuries in Northern Israel during the COVID-19 Lockdown. J Burn Care Res 2020 Sep 10:iraa154. doi: 10.1093/jbcr/iraa154.

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