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Covid-19 quarantine has increased the incidence of ethyl alcohol burns



The Covid-19 pandemic has brought new challenges to the world, such as new personal hygiene habits, the use of protective masks, and governmental quarantine. Unprecedented changes have been observed in 2020. In several countries, temporary and emergency measures of contagion prevention by the new coronavirus have been adopted [1,2].

Because of such measures, there has been a behavioral change in the Brazilian population. Due to home quarantine, the practice of hand sanitizing using alcohol 60–70% has increased, as well as family recreation such as barbecues. Besides that, irregular production of alcohol-gel has also resulted in greater exposure to burns. In this report, we compared cases of burns by ethyl alcohol before and during quarantine due to the Covid-19 pandemic.

We performed an electronic medical record review of patients treated at the Burn Unit from Hospital das Clínicas, Ribeirão Preto Medical School, University of São Paulo, Brazil, comparing patients with burns due to ethyl alcohol 25 days before quarantine, which started on March 19, 2020, and 25 days later. We identified five cases of burns caused by ethyl alcohol in the quarantine period, in contrast to one case before social isolation.

Among these five patients, the burned body surface area (BSA) ranged from 9% to 40%. Two of them underwent debridement and skin coverage with split-thickness skin graft. On the other hand, in the previous period, the only alcohol burn patient had 13% of burned BSA, who was also submitted to debridement and split-thickness skin graft.

Due to the Covid-19 pandemic, several countries have tackled drastic measures to contain the spread of the disease. Such behavioral changes, culminating in the quarantine, promoted the emergence of new routines by the population during this crisis [3,4]. These changes were reflected not only in the number of Covid-19 cases but also in other scenarios, such as alcohol burns.

On March 19, 2020, the National Health Agency of Brazil issued a resolution that authorized, exceptionally, manufacturers of medicines, sanitizers, cosmetics, as well as pharmacies to produce alcoholic antiseptics, making their manipulation and access more flexible by the population. This may explain the tendency of increase in alcohol burns. Moreover, because of people's awareness proposals regarding the importance of hygiene with hand and surface antiseptics, there was a significant increase in the demand and the use of alcoholic solutions, which also contributed to the increase in these burns [5].

Additionally, considering the paralysis of commercial activities, alternatives to obtain financial resources emerged in a clandestine manner, such as homemade production of alcohol-gel. In this study, there was a case of hospitalization due to an accident involving this practice, something unusual in our institution.

This resolution is valid for 180 days in Brazil, and it is understood that this is an emergency in the context of a pandemic. Even with the orientation of using alcohol for cleaning and hand hygiene, it is important to emphasize that hand washing is an effective and remarkably safer option, without the need of handling flammable materials.

Financial disclosure statement

No funding was received for this article.

Conflict of interest statement

All authors have nothing to disclose.

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<http://dx.doi.org/10.1016/j.burns.2020.05.025>

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