



Major Lower-Limb Amputation During the COVID Pandemic in South India

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Abstract

People with diabetes have a higher risk of lower-limb amputations than people without diabetes. The risk of avoidable lower-limb amputations has increased in the coronavirus disease 2019 (COVID-19) lockdown period. Hence, we conducted a retrospective, single-centered study on major amputations during the prepandemic period (March 25, 2019–December 31, 2019) and pandemic period (March 25, 2020–December 31, 2020). During the prepandemic period, 24 major amputations (below-knee and above-knee amputations) were performed and during the pandemic period, 37 major amputations were performed. There was a 54.1% increase in major amputations noted in the pandemic period more than the prepandemic period. This increase may also be due to irregular/missed hospital visits, improper diet, nonadherence to the medications, and physical inactivity. This study shows the indirect effect of the COVID-19 pandemic on people with diabetes, resulting in the increased incidence of lower-extremity amputations (below-knee and above-knee amputations) which might cause a drastic impact on their quality of life. This study also emphasizes the importance of easy and routine access to foot-care specialists to prevent avoidable amputations.

Keywords

COVID-19 lockdown, lower-limb amputations, pandemic, diabetic amputations, foot care

Introduction

The coronavirus disease 2019 (COVID-19) pandemic forced a lockdown all over the world. In India, there was a strict lockdown from March 2020 to November 2020 to prevent the spread of the disease. Only the essential services were open and all the other categories were closed during the stringent lockdown period. This made it difficult for people with diabetes to have regular visits to their physician. People who developed diabetic foot infections also could not visit their podiatrist or surgeon for procedures like debridement. This may lead to many avoidable lower-limb amputations.

A significant increase in diabetic foot complications might harm the quality of life, mortality, and morbidity.¹ The aim of this study was to know the alterations in the amputation rates among the people with diabetes during the COVID-19 pandemic in India. Hence, we conducted a retrospective, single-centered study on major amputation events in the prepandemic (March 25, 2019–December 31, 2019) and pandemic (March 25, 2020–December 31, 2020) period.

Methods and Materials

For study participants in both the pandemic and prepandemic group hospital identity numbers and date of surgery were

taken from the operation theatre registry (OT Register) of the hospital. Then, the identity numbers were used to retrieve the other parameters from the database of MV Hospital for Diabetes. The major amputations recorded from March 25, 2019, to December 31, 2019, were considered as the prepandemic period and the major amputations from March 25, 2020, to December 31, 2020, were considered as the pandemic period as per the announcement of the lockdown in India. People with type 2 diabetes, above 18 years of age, who had visited the M.V. Hospital for Diabetes were included in the study. Age, gender, duration of diabetes, comorbidities, complications, type of amputations (below knee—BK or above knee—AK), type of medications, hospital stay, glycosylated hemoglobin levels (HbA1c), blood pressure, and history of previous surgeries (if any) were collected.

The hypothesis of this retrospective, and single-centered study was increase in the rate of major amputation among

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