



Study of Trauma Cases Attended By Plastic Surgery Team during COVID-19 Pandemic in a Tertiary Care Centre in South India

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Abstract

The emergence of COVID-19 pandemic has created a major impact in the way healthcare facilities practise in this challenging times. Most of the health care facilities worldwide have been designated as COVID care centres and in many centres only emergency and trauma cases are being seen and treated owing to reorganisation of the healthcare staff for COVID related duties and responsibilities. In this study we have shared our experience regarding the trauma cases seen in our plastic surgery department during the COVID-19 pandemic period.

Keywords: COVID-19; Pandemic; Trauma

Introduction

The first case of COVID-19 pandemic in India was reported on 30 January 2020, originating from china. As of 19 May 2020 India has currently the fourth largest number of confirmed cases in Asia.¹ On March 2020, India observed a 14-hour voluntary public curfew at the instance of the prime minister Narendra Modi. Further on 24 March, the Prime minister ordered a nationwide lockdown for 21 days, which was further extended and is currently in the 4th stage of lockdown. Social distancing norms were initiated and personal protective measures such as mask and frequent hand washing and hygiene measures were practiced. With rising number of positive and suspected patients, various hospitals have been designated as COVID treatment centers. The field of healthcare in the time of corona has evolved and is rapidly adapting itself to the day to day newer challenges owing to the spread of the disease. Elective services were cancelled and only emergency services were attended to in various hospitals. Here we share our experience regarding the impact of COVID-19 in plastic surgery activities.

Materials and Methods

This study was conducted in the department of plastic surgery during the period of April- June 2020. Departmental ethics committee approval was obtained. Data was collected regarding the number of cases attended by duty plastic surgery team in the emergency department during the time of COVID. Data regarding the type of trauma cases most attended to, the mode of injury, age group of patient, sex of the patient, work setting etc were collected and tabulated.

Results

As required by the reorganisation of the hospital activity, only patients with life-threatening and limb threatening conditions and malignancies were operated on during the COVID-19 period. Overall, the non-COVID-19 use of the emergency room was greatly reduced, both because of the (Table 1).

Discussion

COVID-19(Corona Virus Disease-2019) pandemic is spreading rapidly worldwide since its advent in December 2019. Human coronaviruses (HCoVs) represent a major group of coronaviruses

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(CoVs) associated with multiple respiratory diseases of varying severity, including common cold, pneumonia and bronchitis². Measures like maintaining social distancing, wearing masks, staying at home, avoiding social gatherings etc. have been implemented worldwide, many countries have declared lockdown for days allowing only emergency medical services and other essential services to function.

Table 1: Overall, the non-COVID-19 use of the emergency room was greatly reduced.

Cracker Burst Injury Hand	8
Machine Cut Injury	16
Trauma (RTA, Knife cut injury, Assault)	33
Self-inflicted wrist cut	4
Scalp Laceration	3
Facial lacerations	5
Thumb Reimplantation	3
MALE	60
FEMALE	12
TOTAL	72
AGE GROUP	NUMBER
Jan-20	10
21-40	30
41-60	22
61-80	1
Total	72
RURAL	32
URBAN	40

Disease in healthcare workers is also on the rise owing to interaction with affected patients. Unnecessary hospital visits are being avoided. Patient monitoring and interaction has taken a new form owing to telemedicine services. Hospitals and healthcare workers are striving day by day to provide medical services to corona as well as non-corona patients taking precautions to not spread the disease from patient to healthcare workers and vice-versa. As expected, a significant reduction of the total number of surgical procedures was seen in the “COVID-19” period compared to the usual activity. The reasons for surgery also

changed significantly. As required by the reorganisation of the hospital activity, only patients with life-threatening and limb threatening conditions and malignancies were operated on during the COVID-19 period. Overall, the non-COVID-19 use of the emergency room was greatly reduced, both because of the limitations in movement imposed to the population (with consequent less accidents and crime) and by the fear of getting infected inside the hospital’s premises. In our hospital too elective surgeries were suspended and only emergency and trauma cases were attended too. Most of the cases were from urban settings as slowly industrial accidents and road traffic accident cases started increasing as slowly lockdown measures were relaxed and movement of people from one place to another place started. Hand trauma cases including machine cut injuries, cracker burst injury, road traffic accidents and self-inflicted wrist cut injuries formed the majority of emergency cases catered by our department during the period of study. Male patients were more than female patients in view of the work place machine cut injuries. Most of the patients were young patients in the age group of 20-40 years.

Conclusion

In this study we found that there is a change in the pattern of cases attended to in the emergency department during the time of COVID pandemic owing to lockdown and restrictions imposed for various activities. Also we found that there is decrease in the number of cases attended to in the time period when compared to usual times. The limitations of the study include that it is a single institute study without any statistical analysis; further randomised controlled studies are required to further substantiate the results.

References

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